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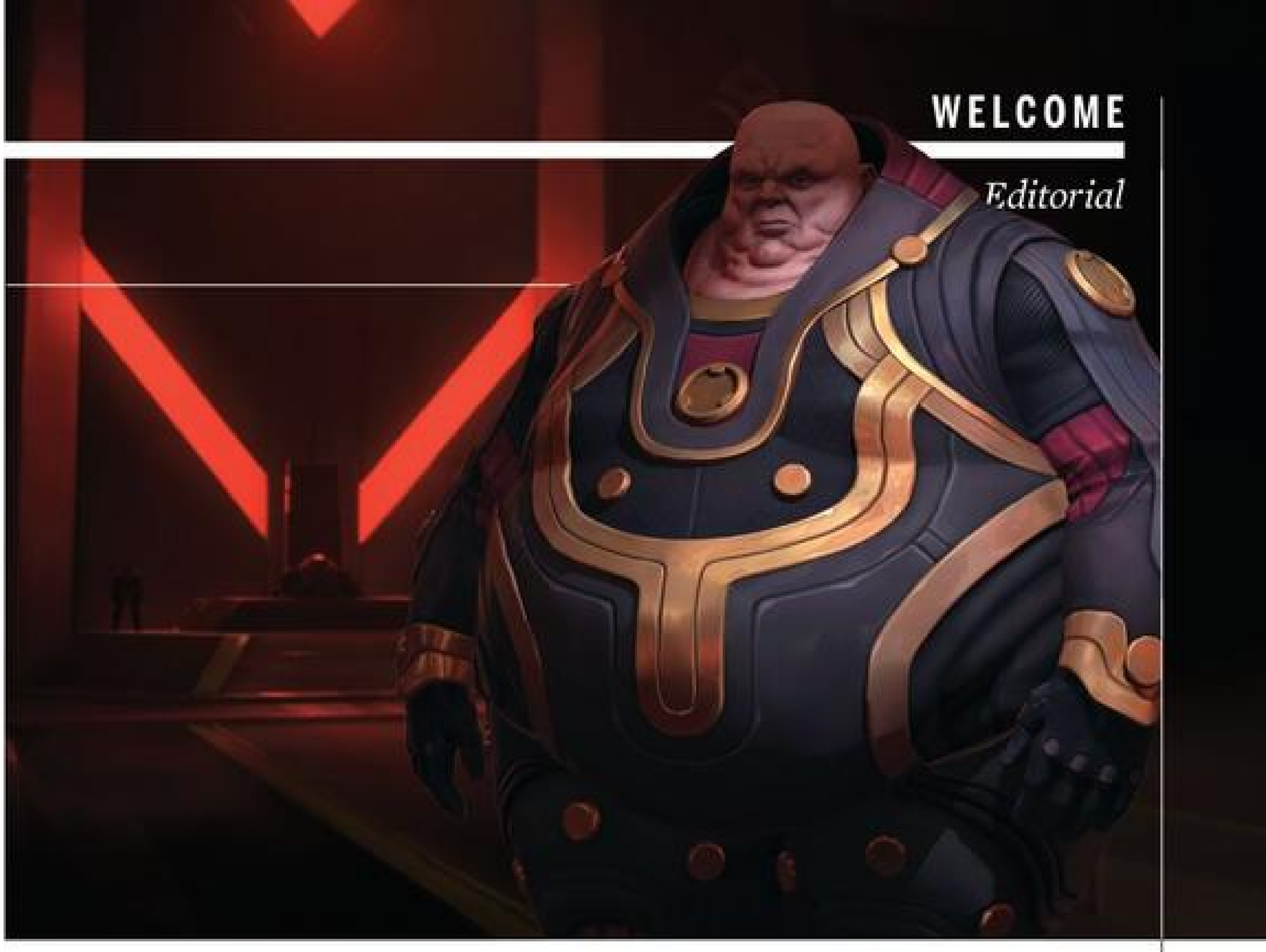

POWER PLAY

Maximum power gaming

Ben Mansill was the editor of PC PowerPlay from issue 1 to 50, and has been a reader since then and loves this thing more than you can imagine.

Hello everyone. I'm Ben, and I'm your new editor. With thanks to David for all his good work over the years, it's my turn for a go at this. Though, it's not my first time at the helm of this legendary magazine. I launched PC PowerPlay back in 1995 and was the editor for the first five years. Maybe we still have one or two readers from back then that remember that incredible time :)

Now, it's a slightly different world. The internet is everywhere, and yes indeed you sure can get a lot of gaming goodness there, but what made PCPP the best in the old days still holds true today. It's quality, readers. Good writing, careful planning, and access to the top devs that like to show and tell us things.

Magazines are also lovely to look at and hold. PC PowerPlay especially so. You can't hold the internet. No, you can't. You are holding PCPP right now. Good for you. It feels good, yes? You can take it to bed with you, if you like. Our pages are meticulously designed and are quite lovely to gaze upon. Think of PC PowerPlay as a *premium* version of the internet.

Today's PC PowerPlay is put together by a gun team that spans the globe. We've added a bit about the main writers on page 59 so you know they're real humans and not journo-bots. This is proper talent and experience at play here. They know their stuff and want you to be excited when they are.

I'm still a gamer, that never let up. I know loads of you have been in love with gaming your whole lives, too. Games are beautiful and wonderful, and we promise we will be excellent at the job of covering it all. That's why PCPP is good, and deserves its place in this world, and in your hands. Hooray!

Ben Mansill

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Exploring the joy of sniping.

ROCKSTAR REPORTEDLY HALTS RED DEAD REDEMPTION REMASTER BECAUSE OF GTA TRILOGY MESS

Planned overhauls of Red Dead Redemption and Grand Theft Auto 4 have apparently been put on the back burner.

Nothing succeeds like success, as the old saying goes, and nowhere is that more true than in videogames. Sequels have been a foundational part of the business for years, and more recently remakes and remasters have become big, bringing our favourite games from years gone by onto new hardware. But two huge and obvious candidates for the remastering treatment – Red Dead Redemption and Grand Theft Auto 4 – have reportedly been halted by Rockstar.

The problem, according to Rockstar insider Tez2, is the GTA Trilogy Definitive Edition, a remastered set of Grand Theft Auto 3, Vice City, and San Andreas, which was a full-on mess when it launched in November 2021.

Tez2 clarified in a reply tweet that remasters of GTA 4 and Red Dead Redemption were only in the "ideas and plans" stage, but they were planned – Rockstar was apparently waiting to see how the GTA trilogy panned out before going all-on on production. And it actually did quite well in terms of sales, which Take-Two CEO Strauss Zelnick said "significantly" exceeded commercial expectations and provided a major contribution to the company's ongoing financial success.

Pimax's 8K VR headsets just got a 120Hz upgrade

Pimax has increased the refresh rate of its Pimax 8KX headsets from 90Hz to 120Hz. When Pimax refers to a headset as 8K, it means that the two screens for each eye make up the total. This means this headset actually has a resolution of about 4k per eye, which is still pretty insane. These Pimax headsets also support a 200-degree field of view.

Overwatch 2 removed hostile architecture from new map at fan request

Twitter user ClearTogether drew attention to the use of hostile architecture in Midtown – a New York-inspired map being introduced in Overwatch 2. The first beta had the map dotted with sectioned benches, a common structure used to deter homeless people from sleeping on them. "I just find it depressing at worse and out-of-place at best," ClearTogether had tweeted about the map decor in early June. Now, in the game's second beta, those benches have been altered.

Ubisoft is trying to save Anno 2070 from Ubisoft

The strategy game is set to lose online functionality on September 1, but Ubisoft Mainz isn't letting it go without a fight.

The developers over at Iron Gate AB continue work apace on Valheim's Mistlands update, posting a new developer diary on Steam (though I'm sure they also took a small break and celebrated when the game hit 10 million copies sold).

The diary, titled "Ancient Ruins Unearthed," includes an impressive look at some cyclopean stone ruins that will populate the Mistlands. We've seen their like before, in the swamps and half-built mountain towers, but those had a decidedly more grounded look. The massive ruins teased for Mistlands, however, are huge stone blocks bound in bronze bands riveted to the stone. They're somehow much more otherworldly than what other ruins Vikings have found around Valheim.

For my part, I'm wondering how these big ruins have anything to do with the equally-big spiders lurking about.

Alongside that, Valheim's team also posted a tease they stealth-released on social media. It's a little hare, an adorable thing that'll wander the Mistlands year round.

PICS: Rockstar, Pimax

NO MAN'S SKY PLAYERS INVENT THEIR OWN CRYPTOCURRENCY AND IT'S WORTHLESS (BUT IT'S SUPPOSED TO BE)

HubCoin's big secret is that it doesn't have any official value.

Have you ever thought to yourself that the one thing No Man's Sky really needs to make it great is cryptocurrency? Maybe not – probably not – but some players have, and they've taken it upon themselves to create one. According to a Vice report, though, the goal isn't to make money, and in fact the people responsible for the project hope to keep it worthless.

The cryptocurrency was created by members of Galactic Hub, a No Man's Sky community that operates across Discord, Reddit, and of course No Man's Sky itself that aims to provide a deeper deep-space co-op experience that the game does on its own.

HubCoin, as the group's cryptocurrency is known, is intended as an extension of that community-building effort. It's aimed at players in No Man's Sky's endgame who have effectively transcended the need for the game's built-in currencies but "still desire access to those things which can only be achieved by player activity," Galactic Hub founder 7101334 said.

Twitch streamers may soon be able to share banlists with other channels

A possible next step for chat moderation.

In the never-ending fight to make chat tolerable, Twitch is testing new safety tools that warn streamers and mods when a user has been banned in other channels. We caught a glimpse of the new vetting tool during a demo presentation of Guest Star, a new feature that lets users appear on streams as a video guest with the approval of the streamer.

As shared by Zach Bussey on Twitter, before a user is approved to be a guest star, mods can see if they've been flagged by Twitch as a "suspicious user" or "serial harasser." This apparently reflects information already surfaced by Twitch, but the "shared ban" tag appears to be new.

Twitch did not go into detail about it, but the tag suggests that it'll be possible to share a list of your channel's user bans with other streamers. It's possible Twitch could automatically flag accounts banned on channels similar to yours.

Razer acquires software haptics company to boost HyperSense

Razer has long sported a fascination for haptic feedback which may be about to get even crazier. The company that believes in shaking up our skulls with vibrating haptic headphones and our butts with buzzing gaming chairs, has acquired Interhaptics. The company specialises in gaming feedback from a software perspective. It also focuses on haptics for VR and mixed reality systems.

Just over 20% of Steam users are using Windows 11

Windows 11 adoption among Steam users cracked 20% in June, up 1.64% to a total of 21.23%. Though Windows 10 is still the most popular OS by far, at 71.26% of the total surveyed, the jump may mean that Windows 11 is finally starting to take root among gamers after becoming available to the general public late last year. That could be because a lot of problematic bugs and bits of annoying features have been patched since release.

PICS: Hello Games, NurPhoto

IN THE STARS

Bethesda's "*Skyrim* in space" **STARFIELD** has been delayed to 2023

It's official: Starfield is not launching November 11 2022 as originally planned. It's instead now aiming at "the first half of 2023", according to an official Twitter update.

Bethesda repeatedly claimed that the game wouldn't be delayed, but the marketing has told a different story. With a focus on developer waffle over substantive reveals, the official videos have been light on concrete info. With only brief in-game clips shown, it's been hard to believe that the game was only months way.

Director Todd Howard has dubbed it "*Skyrim* in space", but he's keen to emphasise that it aims to do more with character customisation than *Skyrim* did: "Some things we didn't do [in older games]: the backgrounds, the traits, defining your character, all of those stats... a lot of the things that older hardcore RPGs, something we used to do, doing those again in a new way."

A big feature will be a new persuasion system. "As far as new systems in dialogue," says Howard, "I think it's definitely one of the most successful ones that we've had."

"YOU CAN SIDE WITH THE PIRATES OR YOU CAN REPORT BACK TO YOUR SUPERIORS"

One of the examples Bethesda offers is how a character can interact with factions like the Crimson Fleet.

"The cool thing about the Crimson Fleet is, what if you're a good person, a good player, and you don't want to play as the bad guy?" says lead designer Emil Pagliarulo. "You can side with the pirates or you can report back to your superiors and be basically a space-cop kind of thing, so it lets you be a good person but still play with the bad guys."

Starfield will also feature companions, and the first shown off is Vasco: the Constellation faction's expeditionary robot. Art of Vasco shows it fixing a ship's underside,

UNCUT GEMS

QUANTUM STORAGE

Researchers have found a way to grow a diamond large enough to store millions of SSDs worth of data inside it. A 5 centimetre diamond wafer could store up to 25 exabytes of data – that's 25,000,000 terabytes, or enough space to download every game on Steam over 6,000 times. ■ *JR*

DREAM BIG

DREAMLIGHT VALLEY

It might have a *Kingdom Hearts*-style premise, but *Disney Dreamlight Valley* is a very different proposition from the JRPG. It's a life-sim adventure full of Disney characters, who you can befriend while you build a Disneyfied neighbourhood. You can become gardening buddies with WALL-E! ■ *FB*

WHAT THE FOX

MOVE OVER ALYX

Gagnetar's *Alyx Replacement* mod for *Half-Life 2* swaps out Eli Vance's daughter for Krystal, the primary heroine of the *Star Fox* series. It first came out in 2017 but now, in a twist, the original Krystal voice actor Estelle Ellis has done "a complete rework of Alyx's lines" for the mod. ■ *AC*

while its strengths are described as traversing rough terrain and carrying a lot of stuff on extended journeys. The robot has weapons, but his primary role is being "peaceful" – so Vasco is going to be your space donkey.

STAR POWER

Starfield's lead artist Istvan Pely says the guiding principle for its look came when, "We coined the term 'NASA-Punk' to describe sci-fi that's a little more grounded and relatable. We wanted a very realistic take. You can draw a line from current-day space technology and extrapolate from there into the future so it's believable and relatable."

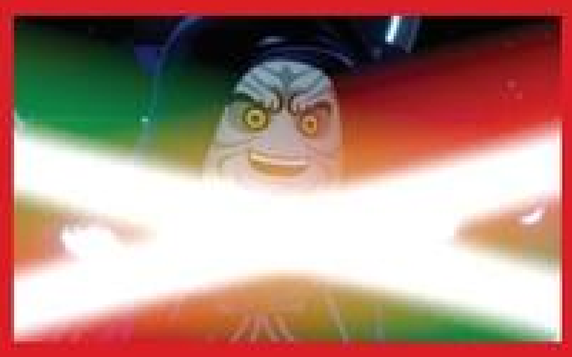
It all adds up to an exciting pitch, but honestly the thing we're hoping for most is just a clean launch. For all their splendor, Bethesda's games are typically a mess when they first release – it'd be nice to see the developer live up to the promise in its update of using the extra time to deliver "the best, most polished version" of the game.

"I like to say that *Starfield* has two 'step out' moments," says Todd Howard. He's referring to that kind of moment in *Oblivion* where, after the dingy and dark tutorial tunnel, you first set eyes on that vast and gorgeous world. It's going to be a little longer now before *Starfield* itself steps out – here's hoping it's worth the wait.

Rich Stanton

While Howard has compared the game to *Skyrim* in some ways, he also says "the mechanics of the world are entirely different".

Highs & Lows



HIGHS

Take-yo time
Ghostwire: Tokyo's director is interested in making a sequel.

MM-No
Final Fantasy XIV producer Yoshida recently asked that players in a new PvP mode stop saying "Nice job!" to opponents.

Lego May Cry
Lego Star Wars: The Skywalker Saga arrived with an unexpected quality: air-chains and infinite combos.

That sucks
Bethesda has also delayed Arkane's vampire co-op shooter *Redfall* to the first half of 2023.

You bet
Streamer Félix Lengyel aka xQc, admitted spaffing about $2 million on gambling in April.

Deus Next?
Square Enix has sold *Tomb Raider*, *Deus Ex*, and three game studios for $300 million. A bargain?

LOWS

DNA Tracing

GAMING'S LINEAGES EXPLORED

"THE WAY HE PRESENTED IT TO ME WAS THAT HE WAS PUTTING TOGETHER THE 1927 YANKEES"

INSIDE BASEBALL

How **38 STUDIOS'** failed MMO gave us *Kingdoms of Amalur: Reckoning*

"Must have been born under a lucky star, this one," mutters the gnome pushing the cart that carries your dead body. His voice is leaden with irony. Your luck extends only to the fact that your corpse is in one piece. A fat lot of good that'll do you on your way to the incinerator.

It's an opening most reminiscent of *Planescape: Torment*, the classic RPG that begins in similarly macabre circumstances. But it also evokes *The Elder Scrolls* – namely the census taker who processes your entry to Morrowind, and mentions that you were born under a certain constellation. In that game, it's a detail that contributes to a sense that you're favoured by the gods, and fated for great things. Here, in *Kingdoms of Amalur: Reckoning*, it's a winking reference that acknowledges the Bethesda pedigree of lead designer Ken Rolston, as well as the fact that things will be different this time.

Rather than fated, you are fateless. Returned from the dead by gnomish experiments, you are the only living individual in Amalur whose story in the great tapestry of destiny has already concluded. That makes you both an exciting and dangerous figure: able to lay down your own path, and knock the fates of others off course.

KINGDOM COME

Behind this premise, and the fiction of Amalur, was the American fantasy author RA Salvatore. The Drizzt creator directed his writers to research creation and destruction myths, and to find patterns in folklore. He circulated short stories about key characters around the office at 38 Studios, where Amalur was first conceived as the backstory of an MMO. But that MMO would never come out, and Amalur wouldn't live beyond its first reckoning.

Fittingly, given all this talk of constellations, 38 Studios was fuelled by star power. It was founded by baseball legend Curt Schilling, a rare MMO nerd with the means to get his dream project up and running – having earned more than $114 million over his two decades in the sport.

It was Schilling who recruited Todd McFarlane, a friend and comic book artist known for Spider-Man and Spawn, as art director, and who called Salvatore out of the blue.

"The way he presented it to me was that he was putting together the 1927 Yankees, and he wanted me in his batting order," Salvatore told Gamasutra in 2007. "When our names came on board, then the real talent came in. He's a pretty persuasive guy, and his batting average is pretty good on the people he pulled in. He got most of the people he wanted."

EverQuest II lead designer Travis McGeathy joined up, and with the acquisition of Big Huge Games, so did Rolston. The intention was to use Big Huge Games' engine to power 38 Studios' MMO – and in the meantime, put out a single-player RPG set in the same world.

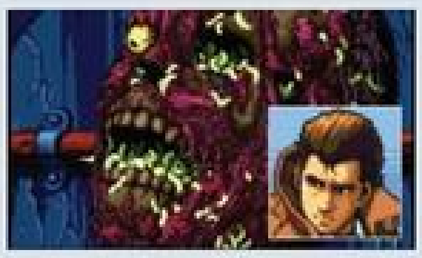
The latter became *Reckoning*, which launched with EA's backing in 2012. There was plenty there for *Elder Scrolls* fans to latch onto – from the tumbler-twisting lockpick minigame, to the NPCs who could be tapped for training in specific skills, to the guards who gave you the choice between prison, fine, and resisting arrest when they caught you stealing.

Dialogue harked back to Rolston's work on *Oblivion*, driven by keywords that allowed you to ask a village drunk's opinion on a distant war if you so desired. And cave networks tended to end with a cliff, meaning they could only be explored in one direction – an old *Elder*

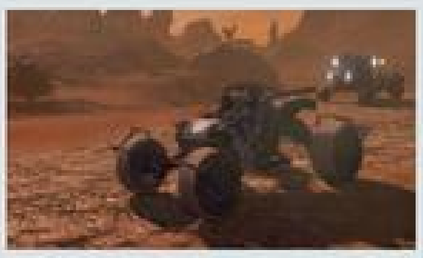
RIGHT: The game received a recent remaster, with the dreadful name *Kingdoms of Amalur: Re-Reckoning*.

RECK YOURSELF

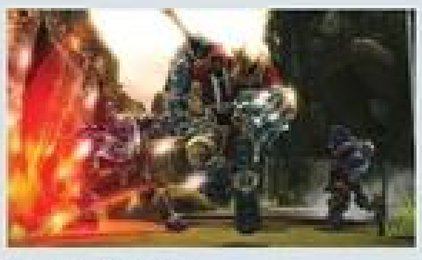
The worst remake titles of all time



SNATCHER CD-ROMANTIC
Hideo Kojima was committing crimes of nomenclature long before Die-Hardman came along.



RED FACTION GUERRILLA RE-MARS-TERED
The same studio that remastered *Reckoning* did this one too.



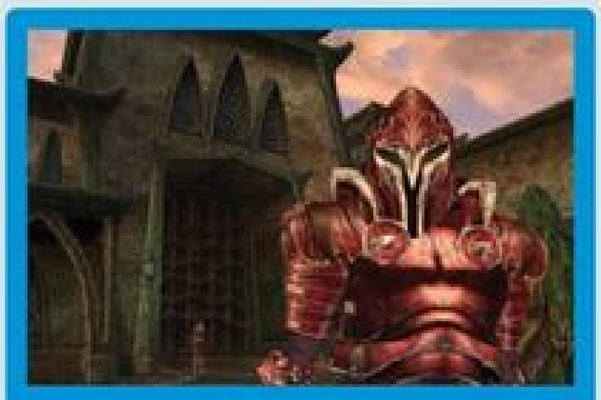
DARKSIDERS WARMASTERED EDITION
Fans suggest the improved resolution make up for the pun.

DARKSIDERS II DEATHINITIVE EDITION
Please, you have to stop. This is an intervention.

DNA Tracing

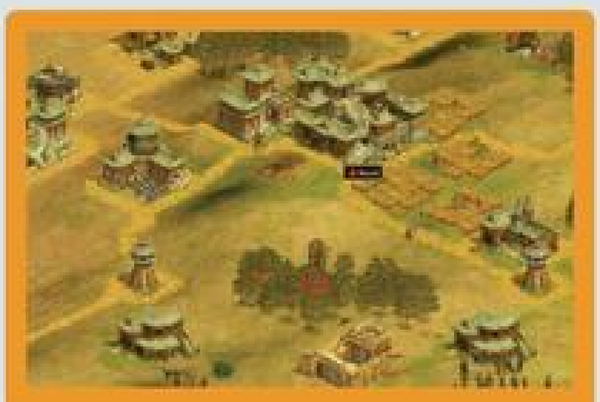
KINGDOM COME

How the Copernicus team came together



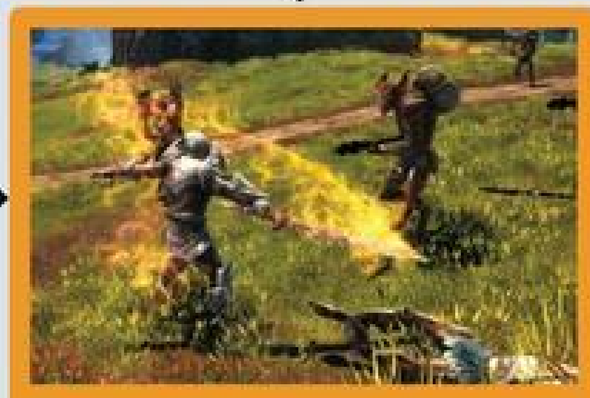
MORROWIND
Ken Rolston was lead designer.

OBLIVION
Bethesda's breakout hit.



RISE OF NATIONS
An RTS from Brian Reynolds and former *Civ* devs.

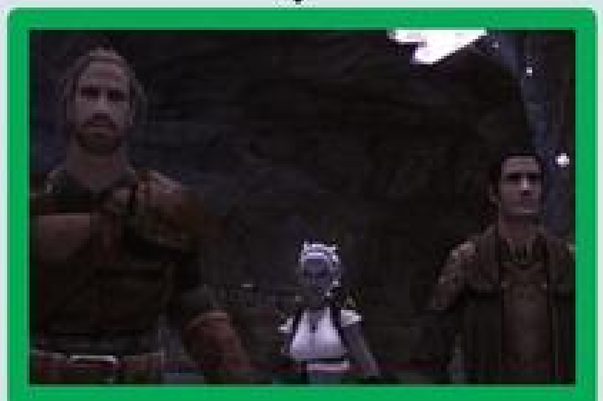
CATAN
An Xbox version of the beloved German board game.



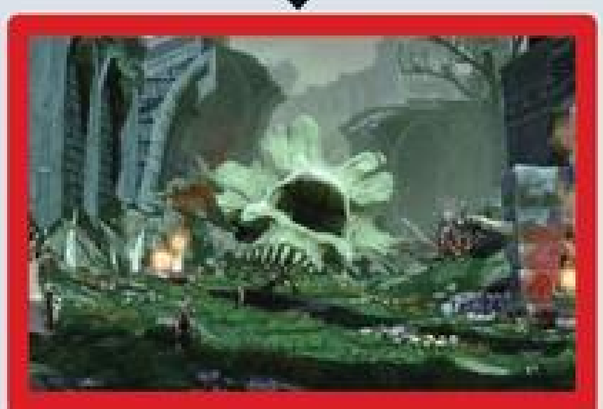
KINGDOMS OF AMALUR: RECKONING
Chunky, fun RPG.

DOMINATIONS
Reynolds-led moblile strategy.

THE TWO TOWERS
Console hack 'n' slash.



DEMON STONE
RA Salvatore wrote this D&D story.



PROJECT COPERNICUS
The MMO that never was.

KEY
- 38 Studios
- Big Huge Games
- Bethesda Game Studios
- Stormfront Studios

Scrolls trick, used to ensure that a dungeon had a clear narrative shape, a beginning and an end.

FINAL FANTASY

Between Rolston and Salvatore, it's perhaps no surprise that *Reckoning* struck a very earnest, Tolkienesque tone. As much as its campaign challenged social division and encouraged you to speak out against it – another Salvatore staple – its fiction was also comfortingly old-fashioned. Found books bore titles like The Words of Solen Reimgar as Chronicled by Parthalan, while standing stones in the wild delivered lore poems over strummed lyre – a slightly corny fantasy backdrop to an unusual premise.

Yet the *Reckoning* team pulled no punches in its aim to punt the RPG genre even further into the mainstream. Its combat hinged on combo moves learned as you level up, and offered convincing heft. It's hard not to like a game that asks you to collect gold by smashing vases with a hammer the size of a giant's croquet mallet. That appealing immediacy extended to satisfying, cut-and-dry questing, too – with a mission's end rarely far from where it began.

What's strangest about *Reckoning* in retrospect are its MMO trappings – its chunky, brightly coloured world and the question marks that hover above the heads of NPCs. They're a reminder that this was to be the overture to *Project Copernicus*, the MMO that 38 Studios was making. But fate, or financial woe, intervened.

The US state of Rhode Island had offered the company a $75 million loan guarantee in exchange for 450 local jobs over three years. But in May 2012, governor Lincoln Chafee told reporters his goal was simply "keeping 38 Studios solvent". That ominous public announcement killed any hope of outside investment in a game which had become wildly expensive. The following day employees discovered they hadn't been paid for the month. A little over a week later, the studio was finished.

LEFT: This is a rare RPG that's better played with a gamepad.

WHAT'S STRANGEST ABOUT RECKONING IN RETROSPECT ARE ITS MMO TRAPPINGS

Just last year, former employees of 38 Studios were finally seeing some money in lieu of their final paycheques – the result of almost a decade of litigation, and a fraction of what they were owed. Schilling himself was "tapped out" after putting $50 million of his personal fortune into the company. In recent years he's become a right-wing talking head, losing work over transphobic memes. He publicly supported the pro-Trump mob which attacked the United States Capitol. It's difficult to imagine Schilling leading a revival of the studio named after his jersey number.

Reckoning, however, has enjoyed a second life – revived by THQ Nordic in 2020, and re-released with a brand new expansion. Must have been born under a lucky star. ■

Jeremy Peel

"As far as the eye could see, you could go," said Schilling of his MMO.

Special Report

Read our further hands-on impressions from Tyler C on p24.

BALANCING ACT

Blizzard hopes for big change by switching OVERWATCH from 6v6 to 5v5

It's not often that a multiplayer shooter decides to reinvent itself six years into its life. In the age of service games that never stop updating, Blizzard is taking a chance by revamping large parts of its competitive FPS and slapping a '2' on the end of it. *Overwatch 2* is not a sequel in the way we understand them. What I've seen of the multiplayer PvP beta so far feels more like an expansion.

Overwatch 2 will have more heroes, more maps and an intriguing PvE story mode, but Blizzard is also taking this opportunity to completely upend the meta it's spent six years building with one simple rule change – *Overwatch 2* is no longer a 6v6 game. One tank slot is gone and it's now 5v5.

Hearing lead hero designer Geoff Goodman explain the change to a virtual room of press, I got the sense that Blizzard wants *Overwatch 2* to be a faster, more immediately exciting competitive shooter.

"We had this big moment where we were gonna make this other game, essentially, and so there's really no better time to try experimenting with really big changes," Goodman said. Goodman and the team started by stripping back the entirety of *Overwatch* and reconsidering its fundamentals. "What are the engagement ranges? What are the team sizes, are we happy with the way it is?" he said. "It was an exciting time, in a way, because a lot of us were around back when we started on [the first] *Overwatch*, and it was kind of that atmosphere again. It's like, 'Well, man, if everything's up in the air, let's treat this like anything could go, whatever we can try.'"

BACK 2 BASICS

The team didn't start at 5v5. Early tests stayed within the bounds of 6v6 and instead challenged the established 2-2-2 role format (two tanks, two DPS, two supports). They tried out a 4-1-1 setup that included one tank, one support and four DPS heroes. "That was maybe the worst experiment we did," Goodman said with a laugh. "You did not want to be a healer in that composition."

Eventually, though, the team started adding and subtracting players from their experiments and hit on something "really fun" with 5v5. Subtracting a tank, in theory, solves a flow problem that Goodman and his team had been thinking about for a long time. "One of the complaints that we heard a lot and agreed with was that *Overwatch* has the tendency to get bogged down with these defensive abilities," he said. "You know, you're playing against a double barrier comp like Orisa and Reinhardt or something, and you're just like, 'I never even get to shoot a player anymore.'"

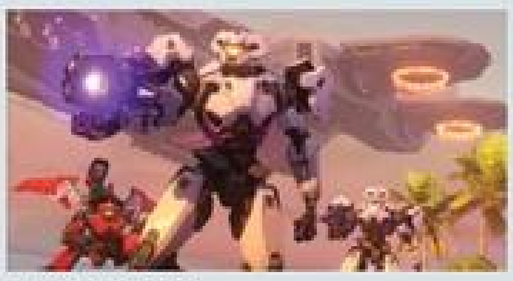
Role Swap

Overwatch's format was very different when it launched in 2016. At first, teams could consist of any combination of heroes. You could have duplicate heroes on a single team for a little while. A few years later, Blizzard switched to the 2-2-2 setup in place now: two tanks, two DPS, and two supports. With one tank removed in *Overwatch 2*, it's now 1-2-2.

LEFT: New maps will include downtown New York and snow-covered Torono.

NEW ERA *What exactly will be in* Overwatch 2*?*

NEW HEROES
Overatch 2's PvP beta only features one new hero at the moment (Sojourn), but more are planned for the final release.



A CAMPAIGN
The part of *Overatch 2* that returning players will actually have to pay for is the new PvE campaign.

5V5
Overatch 2 moves away from the 6v6 format in favour of 5v5, dropping one Tank role from each team.

PUSH MODE
Push is a new mode that will replace the old 2CP objective maps. It's a bit like two concurrently moving payloads.

I can attest to that. That annoying double barrier comp isn't as common as it used to be, but it's true that *Overwatch* fights often consist of two confusing blobs of colourful characters huddling behind a barrier and shooting at each other. Taking away a single character on both teams doesn't sound like a monumental change (I was sceptical at first, too), but a single tank setup has some immediately noticeable effects. No option for a double shield comp is the most obvious. I've already noticed this encourages players to spread out more and use cover to avoid threats. There are also fewer large bodies on screen, so it's easier to focus on a single target.

THINK TANK
Once Blizzard decided 5v5 was the direction for *Overwatch 2*, it began the process of tweaking and reworking heroes to make sense on a rebalanced team. Unsurprisingly, that meant changing a lot of the game's eight tanks.

"We are definitely tweaking the tank role to be a bit more aggressive," Goodman said. The goal is for every Tank to feel "brawlier" and more capable of doing the job that they've had all along – escorting the team through chokeholds, absorbing the brunt of incoming damage and putting pressure enemies with close-to-mid-range attacks.

Orisa has seen the most dramatic rework, with a complete kit overhaul that ditches her deployable shield for a javelin that can skewer enemies or briefly absorb attacks. Reinhardt, too, is now better equipped to charge toward enemies and lob ranged Firestrike attacks into groups. Doomfist, a melee-focused DPS hero, is switching roles to a tank who specialises in disrupting the enemy backline. Basically, 'hunker down' tanks are out and 'lets push forward' tanks are in.

ENCOURAGES PLAYERS TO SPREAD OUT MORE AND USE NATURAL COVER

After hearing about the tendency for shields to bog down *Overwatch*, I posed a question to Goodman: is the game better without shields?

"To broadly answer the question, no, I don't think [*Overwatch*] is better without shields," he said. "But clearly it's worse when there are too many shields." Goodman believes it's not a question of if there should be shields in the meta, but how they're used. He explained that Reinhardt, for example, is an interesting addition to the *Overwatch* meta because he creates a threatening one-directional area. He's powerful, but "the second you're able to flank the team or surround them in some way, the shield becomes a lot worse very quick".

Whether or not Blizzard's sweeping balancing changes will be well-received in the long run is yet to be seen, but after a few days in the beta, I'm having a good time. What makes me nervous is what's getting left behind – abilities, maps, and team configurations that will disappear when *Overwatch 2* overwrites *Overwatch*.

I'm sad I'll never again get to do the Reinhardt/Zarya combo my friend and I have practiced hundreds of times, or play in iconic *Overwatch* locations like Temple of Anubis when the Assault game mode is swapped for Push. *Overwatch* is entering a new era, and not everything can come with it. ■

Morgan Park

A collection aside

A COLLECTION ASIDE

It's definitely possible that MEGHANN O'NEILL is getting soft in her middle age, but she found a lot of the following games to be unreasonably difficult, mostly in challenging, frustrating, surprise dying, "learn to play" kinds of ways. Luckily, those are all the things she finds fun, in medium sized doses. It's also lucky that there was at least one purely fun game in the collection, because there probably actually are only so many words you can type into a recalcitrant parser. Please consider your own preferences for fun as you decide which of these games are for you.

PLEASE, TOUCH THE ARTWORK

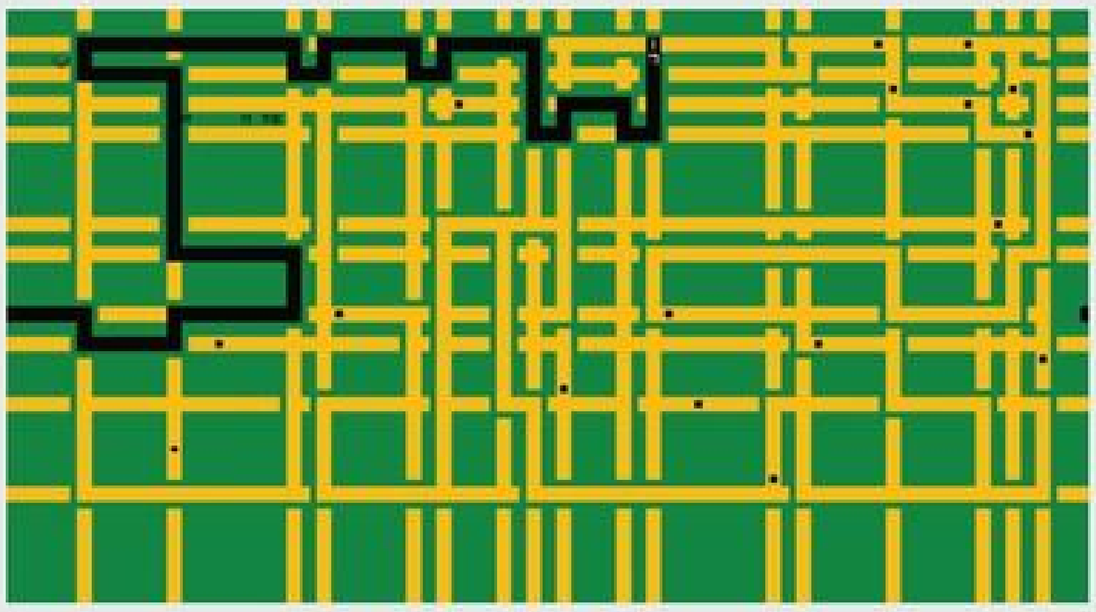
DEVELOPER Thomas Waterzooi **PRICE** $1-4.50 + DLC

WEBSITE store.steampowered.com/app/1097100/Please_Touch_The_Artwork

Art galleries are the only place my husband and I argue. We nearly broke up at the Guggenheim in Bilbao, over our divergent interpretations of modernist sculpture. One thing I think we can all agree on, however, is that Piet Mondrian's abstract geometric paintings were begging to be made into a puzzle game. *Please, Touch the Artwork* consists of three galleries, which are inspired by the artworks Composition with Large Red Plane, Yellow, Black, Grey and Blue (1921), Victory Boogie Woogie (1944), and New York City (1942).

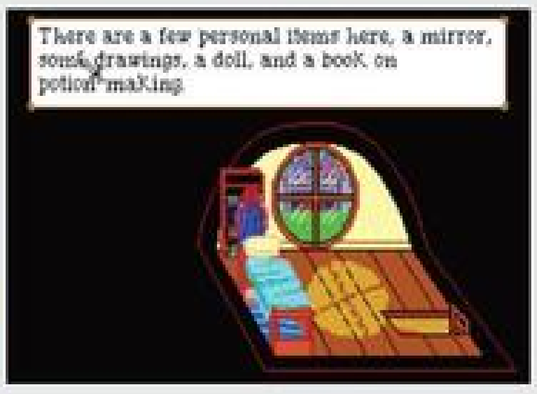
Things get surprisingly difficult across more than 150 levels, the first of which require dragging lines and filling colours, by solving the order in which each puzzle piece is presented. Lines have a defined direction, from a point, and colours are filled adjacently to your cursor. It's abstract, but makes sense, after some experimentation. Boogie Woogie requires squares to navigate to square shaped holes, via the rotating of other squares. New York is a bit like playing Snake in a maze, with poetry. I enjoyed this gallery, but my eyes got tired really quickly. So many lines.

Designer, Thomas Waterzooi, tells me that most of the game is procedurally generated. I didn't pick it, although I did notice stems in the soundtrack that dropped in and out contextually. Another interesting thing about *Please, Touch the Artwork* is that the puzzles are so obscure, if you come back to it after a few weeks, you may have completely forgotten how to play. Like I did. Perhaps aim to beat a few levels each night, in place of your *Sudoku* or crossword habit. I'm very sure this intersection of art and puzzle is good for one's mental acuity, if not marital harmony.



Betrayed Alliance
[score: 20 of 125]
Inside the cave looks to be a hermitage, or maybe a casino of sorts, or perhaps a retirement home.

Betrayed Alliance
[score: 22 of 125]
The darkened cavern is cool and windy. The whispers in the air make you question whether you are hearing voices or if it's only your imagination.



BETRAYED ALLIANCE BOOK 1

DEVELOPER Slattstudio **PRICE** Free **AVAILABILITY WEBSITE** rjslattery.com/betrayed-alliance

If it looks this much like a late 80s Sierra game, there must be a thousand ways to die, right? Yeah, I found a few but, given you can walk as close to the dartboard as you like and not lose an eye, it's an only "somewhat menacing" experience. Is the parser annoying? Yes, like when I failed to read notices/papers/sheets on a noticeboard/board/wall, but it's definitely not more annoying than in *The Colonel's Bequest*, into which I also typed a great many words this month. Is *Betrayed Alliance* as challenging as a late 80s Sierra game? Why yes, much more so, I'd say.

I did solve some puzzles myself, I swear, having definitely underestimated the game, initially. This was largely thanks to not exploring thoroughly or thinking creatively enough, however. Make sure to notice the "marbles" in the first room and their unique properties, for starters. Even the mini games are impossible (long story involving rings, ships and the hermit from *Quest for Glory*. Not to mention a chess problem I had to stare at for a very long time). And if you found the combat system in QFG difficult, you're going to need to practice running evasively.

Betrayed Alliance casts you as fugitive, hero, library book returner, friend to squirrels and many other things. There's gold to accrue and skills to build. It's surprisingly ambitious. *Book 2*, currently unreleased, promises more of the same. Mostly, I enjoyed the self-deprecating, silly (sometimes angry) humour. Although I also love playing real games from the late 80s, this mix of fresh content, nostalgic reference and self-awareness is compelling. It's hard not to recommend this to Sierra fans, especially because it's free. It's hardcore, though. I apologise in advance.

CHINATOWN DETECTIVE AGENCY

DEVELOPER General Interactive Co **PRICE** $35.95 **WEBSITE** store.steampowered.com/app/1172190/Chinatown_Detective_Agency

In 2022, it's rare to play a game that is so hostile to players. *Chinatown Detective Agency*'s conceit is that it relies on your "real world knowledge" (and Google) to solve puzzles. I misunderstood this. It was stated once, via tutorial dialogue, and never repeated. I scoured the (in-game) library for information about a book, when I was supposed to be IRL googling a quote to discover its author. Amazingly, I then forgot Google completely (on the very next puzzle) when I was supposed to be buying a ticket nearby to an IRL location that I thought was fictional.

Further, I then missed a plane because I left the game to help my son chop potatoes (I didn't notice the in-game clock). Then I became curious as to what would happen if I failed a hacking minigame continuously until I had no money (I was soft locked out of all progression, so far as I could tell). And there was this whole cipher situation which required meticulously poring over strings of numbers to (eventually) reveal a word. Finding letters was fun, 3 or 4 times, but 25 repetitions were required. All of these examples are from the (short) tutorial.

Gosh. I nearly stopped playing. Why did I continue? I guess I was intrigued by the "real world knowledge" requirement being inspired by the Carmen Sandiego series. Did I enjoy *Carmen Sandiego*? Not precisely. But I do have fond memories of the experience, mostly screeching with friends about the unfairness of it all, when we failed. In the late 80s, however, success relied on a physical almanac and clever thinking. Googling questions raised by puzzles and locations in *Chinatown Detective Agency* (bizarrely) yields game guides and spoilers faster than solutions.

I persisted, but mostly via use of a game guide. I can appreciate that googling cities based on a partial postmark, visual clues and "thinking laterally" could be fun, but I really just wanted to know what happened next for the story, and gaze at the rich world culture, reimagined as cyberpunk pixel art. I was intrigued by the conspiracies and twists, while investigating mysterious events for a host of colourful characters. Dialogue and well placed accents, like holograms, robots and drones, all contribute to the creation of an engaging and evocative world.

I came to really appreciate the protagonist, Amira Darma's, wry sense of humour, too. On one mission, undercover in a little black dress and heeled boots, I accidentally arrived six hours early to a meeting in a fancy skyscraper, then couldn't leave or use the wait function (another problem I encountered occasionally, related to the probably superfluous flow of time). And so, took a moment to notice her reactions to the lobby paintings, Compete, Adapt and Survive. Six game hours later, I had a conversation that was beautifully linked, thematically, to these three ideas.

Chinatown Detective Agency is very ambitious, even when experienced more linearly than was intended; as a "research game". The art, sound and music are wonderful, and the dark, slow-paced story gripped me, for sure. As such, its initial idiosyncrasies seem all the more dissonant, because the effort spent polishing these aesthetic aspects seemingly didn't extend to conscientious playtesting and tutorialisation. I enjoyed this, but leave feeling intensely curious about how one could more effectively create a spiritual successor to *Carmen Sandiego*.

A collection aside

DUNGEONS OF DREADROCK

DEVELOPER Prof. Dr. Christoph Minnameier **PRICE** $5.95 **WEBSITE** dungeons-of-dreadrock.com

Games are fun. Maybe you're into cool stories, tough bosses or playing with others. Your preference is good with me. Dungeons of Dreadrock, however, is deliberately "fun" by design, in chunks. One hundred chunks, to be precise. Generally, I find block pushing puzzles and rhythm games somewhat (not unpleasantly) frustrating, but I powered through this in two sessions, over four hours without ever wanting to take a break. It's fast-paced, sequential and relatively straightforward to solve, all of the time. This makes for a very potent fun-formula.

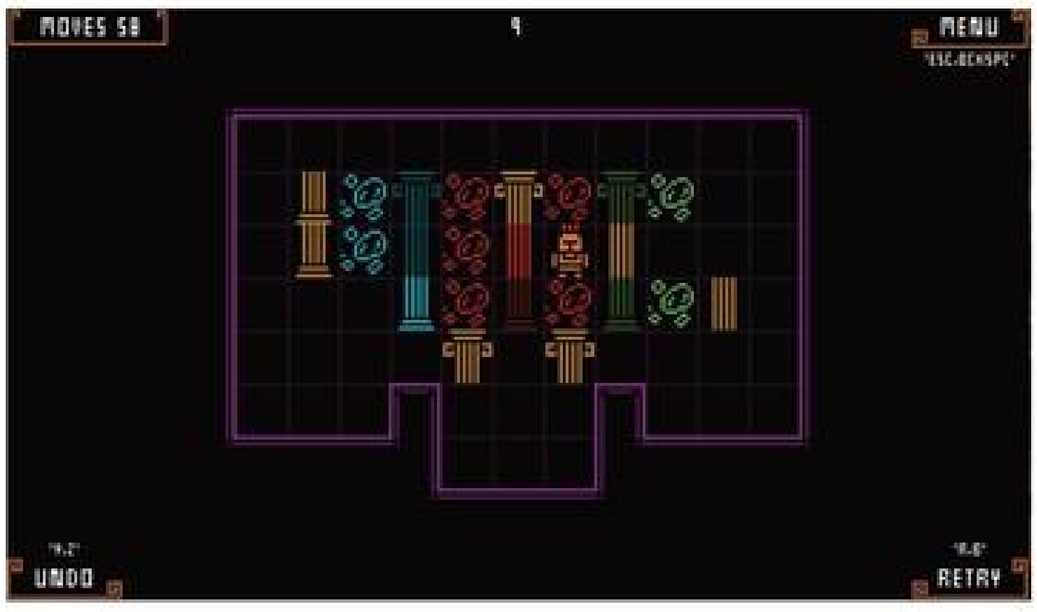
Your brother has been taken into the mountain and he's tasked with defeating the king. Given this happens annually and no-one returns, you set out to rescue him. Tiny increments of story are delivered via dreams, but explicit narrative is minimal. I don't think the main characters even have names, beyond Brother and Sister. It's fun to imagine the lore behind how this mountain became infested by a weird collection of monsters, but the answer is probably just that they are incidental, in support of whatever works best for play.

I immediately compared this with Lozange Lab's Swim Out in my head, fairly inaccurately. Mostly, it's treants, dead bodies and rocks that are placed strategically, sometimes on pressure pads, or down holes to land on some relevant feature of a lower level. Some creatures, however, move either slowly, like zombies, or fast, like skeleton warriors. Minotaurs will charge and drow will shoot arrows. Each has a number of hitpoints, going down in one to ten hits if you're using the sword, or less from other kinds of damage, with spikes and fire killing most instantly.

Unlike Swim Out, creatures don't wait for you to move, so it's more like "real-time puzzling" than turn-based. Sort of. It's actually more like a rhythm game, where you get used to the speed, movement, attacks and patterns of pieces, then solve the puzzle with these in mind. Do I have time to dodge the minotaur, evade the treant's attack, push the minotaur and cross 4 squares before the minotaur charges again? Often the answer will be "maybe" or "only just" and I learned what was possible by feel and with experience.

The game never gets very difficult, largely because I always felt that I knew what I needed to know, for the current puzzle, based on what had come before. There were a few deadly (instructive) surprises and a few times I needed a nudge from the in-game, incremental hint guide, but every puzzle felt carefully crafted. I particularly loved noticing that you can walk through blood and create bloody footprints (which I'd thought was an aesthetic detail), then finding that bloody footprints are used as a puzzle solution. A keen eye is mandatory.

My younger son stepped in to play a later level of Dungeons of Dreadrock. He's "good at games" but gave up pretty quick. The solution involved throwing the sword, leaving the sword behind, dodging two monsters while unarmed, flipping levers, dodging fireballs and, generally, impeccable timing. Daggy Old Mum aced it in two or three attempts, which horrified him. This is a fun game, for all the abovementioned reasons, but also because you learn at the same rate as the game is ramping up difficulty (It was pretty fun beating Lyndon, too).



SOKOBOS

DEVELOPER Daisy Games **PRICE** $7.50
WEBSITE store.steampowered.com/app/1655890/Sokobos

Dungeons of Dreadrock warmed me up for Sokobos, which is a more "hardcore" block pushing experience, to say the least. In a feeble attempt to learn how to play this genre with greater success, I've fallen down a rabbit hole of research papers critiquing (the original) Sokoban's design and iterations. Sokobos definitely teaches you its additional and original aspects, like how to push a block through coloured paint, but assumes you are coming at block pushing with professor level chops. How can something that looks so simple be SO HARD?!

I'm getting better at eyeballing the level before I start and making useful observations. For example, if I put a piece on a wall, it better be finishing on that wall, I can't pull it back. Simple, right? But what if putting it on the wall is the only way to get it out of the way of other pieces that have to be sequenced into some inscrutably precise order? Thank goodness for the reverse button. And the ability to skip levels. It feels so counterintuitive to move a piece away from its goal, or to leave it half moved, but design relies on these ideas constantly.

Sokobos casts you as a cocky builder, tasked with assembling a temple for Zeus. My temple looks like Anubis' breakfast. The gods are unimpressed. Completing levels was genuinely surprising, especially one time when I clocked 11 moves and the next score I saw was 63 (the online comparison feature is fun). The bravado of the dialogue does neatly match how I feel when I can beat a level but, mostly, I'm 513 moves in with one block blocked into an inappropriate wall. Ancient Greeks seriously didn't know how to pull? Only push? Really? REALLY??!!

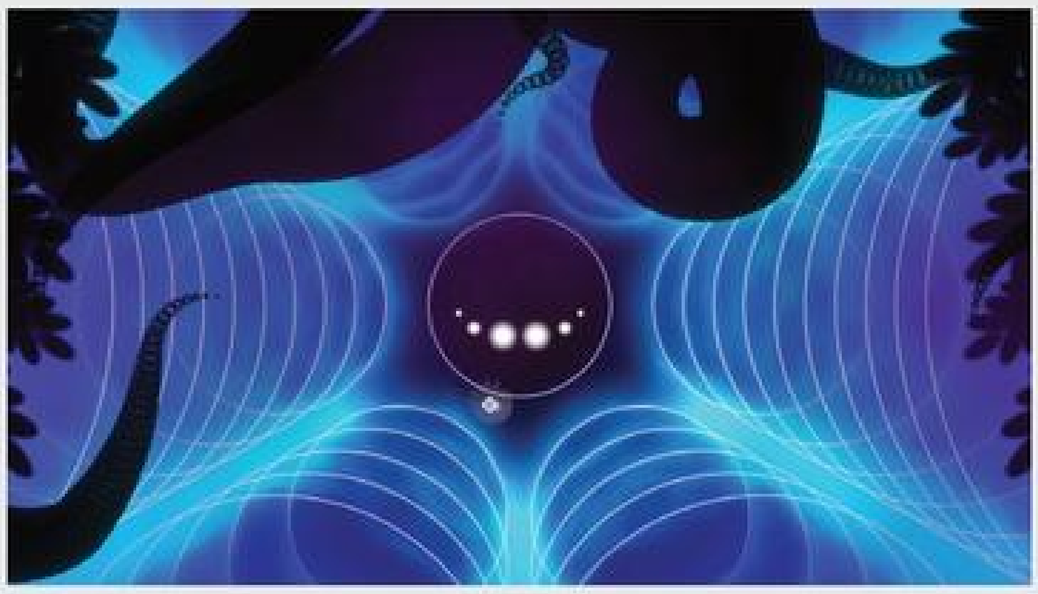
ONDE

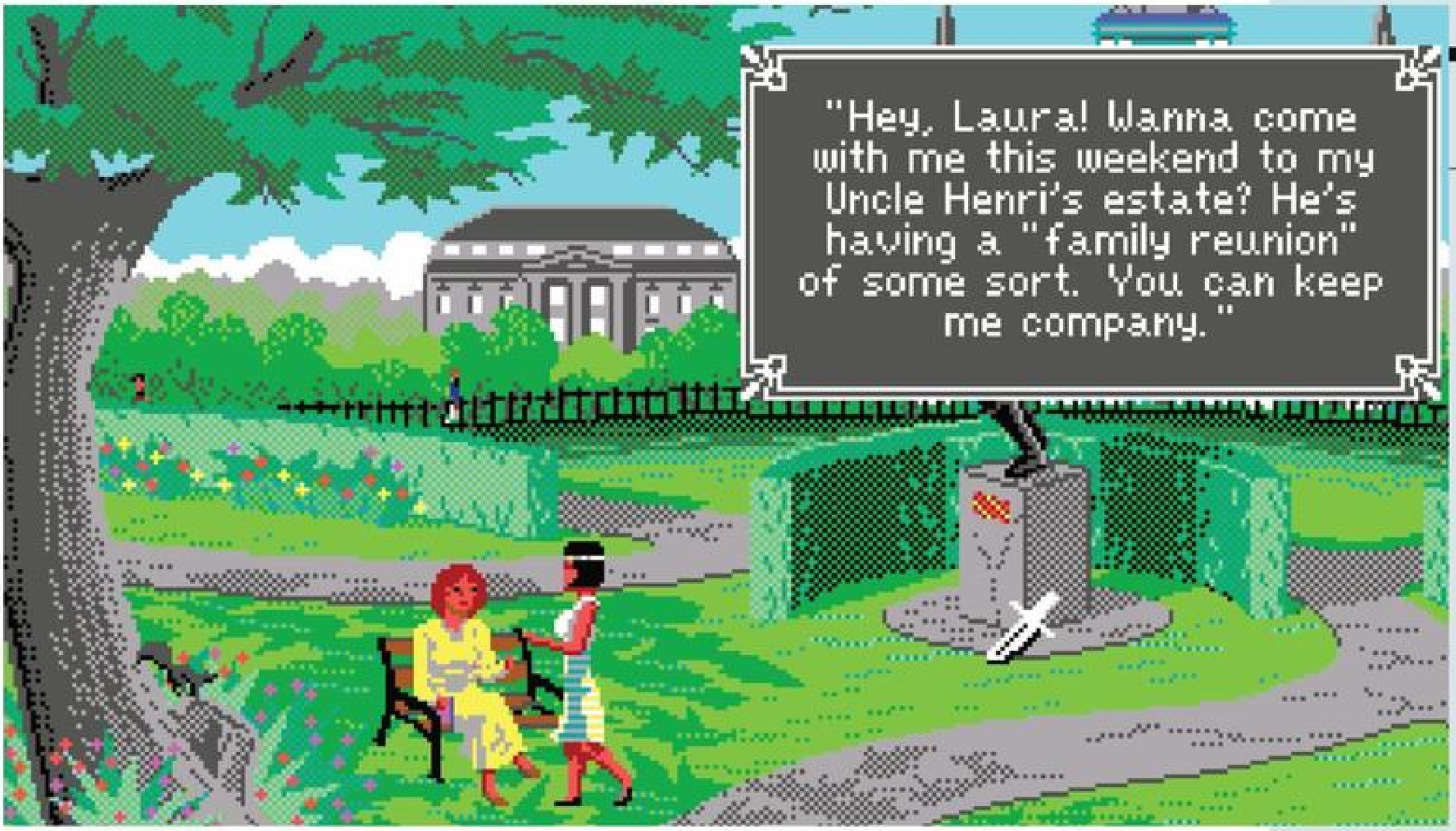
DEVELOPER Lance, 3-50 **PRICE** $19.95
WEBSITE store.steampowered.com/app/1676910/Onde

Bubble-based platformer? Kinetic puzzle toy? Interactive music experience? Onde is hard to define. There are lots of circles and arcs, let's start there. When you're traversing one, you're alive. When you're not, you respawn at a previous curve. Sometimes, you can create arcs, other times they're made for you, and often they move. Black arcs kill you, teal arcs stop moving when you touch them, pink draw you in, and so on. Everything makes sound, on top of the soundtrack, and I'm surprised by how coherent the musical composition is, despite its complexity.

Is there a story? Yes? At least, there's danger and a vast journey to undertake. I'd guessed that a lot of this game was set underwater, but I wasn't sure until I left the water and an audio filter was applied as I re-submerged. There are lots of colourful aquatic plants to strum, in a lightly musical way. I might be a jellyfish, but one with detachable ... gonads? At any rate, unidentified pieces of me are attracted to puzzle locations, usually allowing some combination of W, A, S and D to create arcs in a way I need to manipulate, time and navigate carefully.

I'd like to compare Onde to some other game, so you could get an idea of how it feels, but I'm honestly at a loss. It's rare to find an experience that evolves so successfully (over several hours) by riffing on unique, underlying mechanical ideas. It's definitely for fans of puzzle games. I experienced the classic, "this is impossible, ohhhhh," feeling a great many times when experimenting with circles. And it's for lovers of harmonics, modes and synths, for sure. It's probably because I spent too many hours blowing bubbles as a child, but I loved Onde inordinately.




"Hey, Laura! Wanna come with me this weekend to my Uncle Henri's estate? He's having a "family reunion" of some sort. You can keep me company."

THE LEGACY OF GENRE.

For a game that has not aged particularly well, it took me a long time to notice.

Meghann O'Neill was never a girlish "lover of horses" but only if you don't count Smith the talking horse, literally every amazing horse in *The Sims 3*, *Roach* and so on.

My childhood memories of *The Colonel's Bequest* have proven to be fragmented and inaccurate. I remember being convinced that I'd completed it, even if the ending dialogue raised questions about my competency. When I was 12 and games were hard, no game was going to tell me it wasn't finished yet. I also think I retrogamed this for PCPP around ten years ago, probably butchering my write up with rose tinted nostalgia. But, at the wise old age of 43, I may finally be ready to take an honest look at this bizarre experience and its unusual design.

Sierra made a lot of adventure games, spanning various parser, then point and click, interfaces. They also experimented with genre, notably in *Quest for Glory*, where (as in a roleplaying game) you can choose character class and develop skills and abilities. As a thief in *QFG1*, it was shocking to explore INSIDE the houses and shop fronts that had been merely background art for the fighter. The idea that content was locked or altered, as a consequence of my choices, does not seem so radical now, but adventure games were originally very linear.

Colonel's Bequest more experiments with progression, because in order to frame a mystery, events must unfold over time. As Laura Bow, you are (incongruously, for many reasons) invited to spend the weekend with your friend's rich uncle, her (very cliched) family, servants and the dog (and the horse). As you walk from room to room, to stumble on a new moment of whispered plotting or sexual harasment, each 15 minute increment is triggered. It is possible to miss every clue and relevant piece of information until (pretty much exactly) 9.30pm.

What happens then? Well, in order to progress, you need to access a location behind a locked door. To unlock the door, you need to have collected several interdependent, well-hidden items and have effectively solved puzzles that are more about "just messing around with stuff" than the door. There's a whole adventure game that needs to be solved in the background, but this is never made clear. By 9.30pm, content comes to a complete halt, for no apparent reason. I'm sure this is where I had to consult "Dad's friend" (the hint book), as a child.

Sierra should have doubled down on obliviousness. If you can fail to discover that the mansion is (hamfistedly) riddled with secret corridors, from which to eavesdrop, why can't you have an early night, or hang out in the kitchen? No-one else notices the murders, even when you explicitly tell them to go to a corpse's location. If progression had been tied to anything other than being the world's biggest snoop (why would I walk into everyone's bedrooms for no apparent reason?), then deciding to snoop could have been significantly more rewarding.

Having said all of this, the weirdest moment for decision making has to be the ending. For starters, there's a 50% chance of fluking the good ending, even if you are incredibly oblivious. Secondly, the bad ending is a fair bit more interesting than the good one. Also, even if you figure out who the murderer is, based on expert sleuthing, mental gymnastics, process of elimination (because so many people are murdered) and dumb luck, that won't necessarily inform your final choices in the game, anyway. I've definitely forgiven 12 Year Old Me for being a bad detective.

Have I ruined my nostalgic love of *The Colonel's Bequest*? No. I think that it's OK to expect more in 2022, but Sierra's strange genre mashups were worthy experiments at the time, for sure. If you haven't played *Overboard*, by Inkle, I'd recommend it. As well as three hilarious endings, there are so many secrets to discover (or not) along the way. As for me, I'll aim to play *The Colonel's Bequest* again when I'm around 80 and ready to bequeath my (very small) fortune to a host of ungrateful relatives. I'm going to need to get myself a horse, too.

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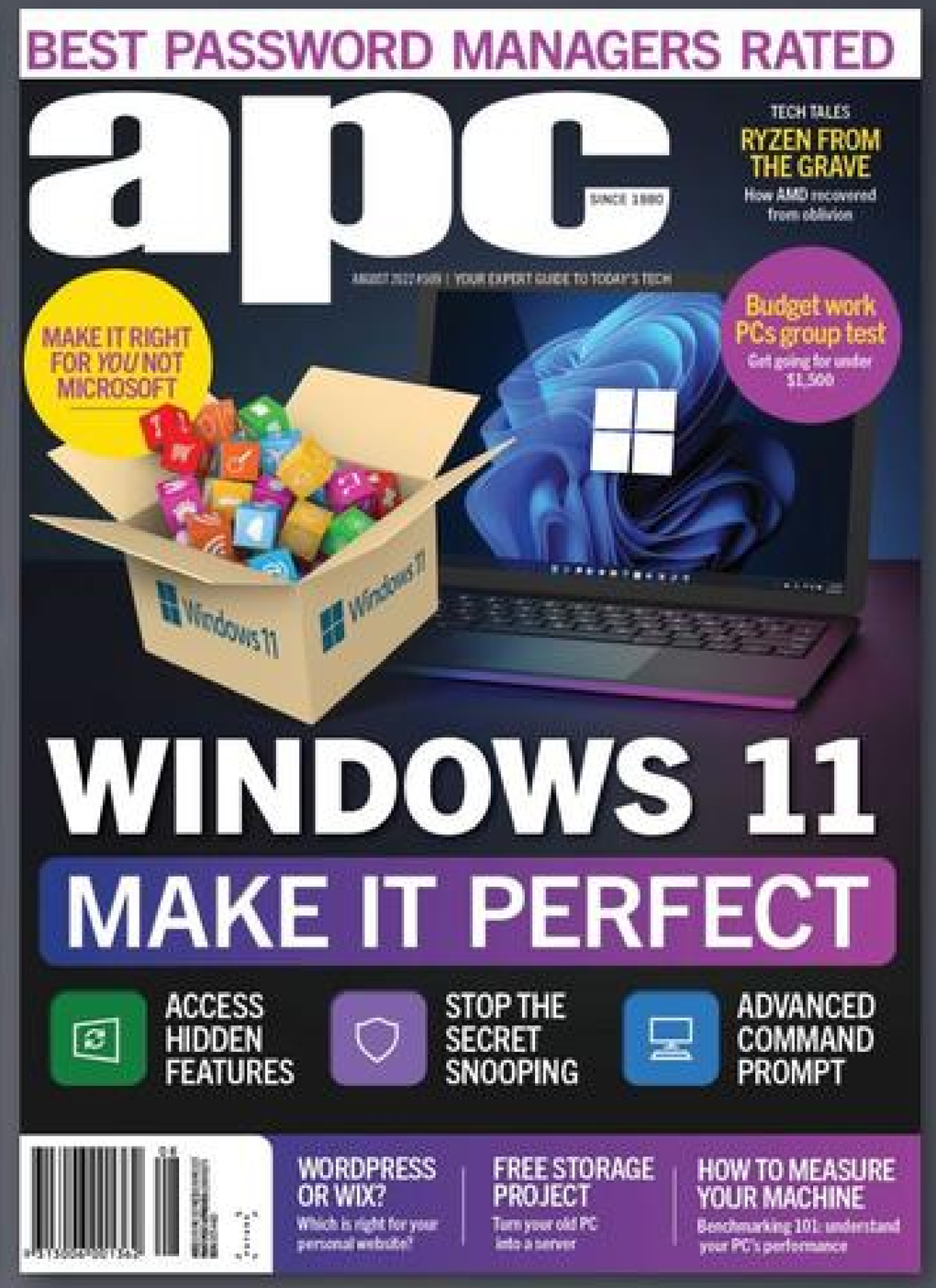

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FUTURE

Dune: Spice Wars

DESERT POWER

For the first time in 20 years, war returns to Arrakis in real-time 4X **DUNE: SPICE WARS**

By Wes Fenlon

I thought he who controlled the spice controlled the universe, but it turns out he who controls the spice mostly just pays hellish taxes.

Here I am on Arrakis, spreading Fremen warriors to more and more territories so I can collect enough spice to rule the desert planet. And yet I have to pay most of my haul to the Spacing Guild as a bribe? And they want more every month? Forget this competition between the Atreides, Harkonnen, Fremen, and Smugglers factions: I hope 4X strategy game *Dune: Spice Wars* eventually includes a win condition that lets me tell the Spacing Guild to piss off. They'd probably nuke me from orbit, but I worked hard for

that spice, braving sandworms and massive storms and treacherous spies. If I'm gonna go out I want to end my rule like Tony Montana, mountains of spice glistening on my impressively over-sized desk.

Dune: Spice Wars is the first videogame based on Frank Herbert's books in two decades, and it's an ambitious project for developer Shiro Games. When I think 4X, I think enormous games like *Civilization* and *Total War* made by hundreds of people, packed with so many menus and tooltips I'm intimidated before I've even left the title screen. Shiro Games, meanwhile, has a team of only 22 working on this new 4X strategy adaptation of Dune. (Shiro developed its breakout game, *Northgard*, with a team of just nine or so devs). *Spice Wars* launched in Early Access at the end of April, with a single-player mode for now and open-ended plans for future growth.

HOW YOU DUNE?

"We need to get trust and a first wave of feedback from players: what they like, what they don't like, what they feel is balanced," says creative director Sebastien Vidal. "Everybody says, 'We're going to listen to our players and do stuff that matters to them,' but [for us] it's really the case – we want to have that feedback and develop in the direction that the community wants to see." Vidal tells me that when the studio released *Northgard* into Early Access in 2017, players surprised them by asking for multiplayer first, so that became their focus. Shiro Games did eventually add a campaign, but it came much later. For *Spice Wars* co-op and PvP are likely going to be the first features to arrive in Early Access, along with an economic victory condition, though players could again surprise them.

"WE NEED TO GET TRUST AND A FIRST WAVE OF FEEDBACK FROM PLAYERS"

Spice Wars is at the moment a somewhat dry (forgive me) 4X game, missing the personality that the best of the genre deliver through chatty leaders, narrative events, or ample flavour text. Last year's *Old World* was a sterling example, with some events tied directly to the personality traits of your leader and others pulled from real history. *Spice Wars* is recognisably Dune because of the desert and sandworms and ornithopters, but it's missing that extra layer of personality.

I crave a deeper event system that draws from Dune lore, like political snafus involving snubbed Bene Gesserit witches or my entire civilisation suffering a massive psychic blow when the Sardaukar show up to kick my ass.

SPICE WORLD

As it stands *Spice Wars* is refreshingly breezy for this style of strategy game, though, with my first game ending in less than four hours. And it wasn't mindless: I got the sense that I could play *Spice Wars* significantly differently in control of another faction or if I was gunning for a different victory condition. It took me until deep into my first game to start understanding the depth of many of its mechanics and how much more I could've done with them, knowledge I'm looking forward to exploiting in another run.

As the Fremen I was able to keep my armies healthy in harsh desert conditions and summon worms to travel vast distances, but I was particularly unpopular in the political Landsraad council, so I spent far too long ignoring the monthly votes that granted factions major advantages. I focused on growing my military and economic tech trees and missed out on how powerful espionage could be, too. If I'd devoted more spies to the Atreides house, I may have been able to assassinate Duke Leto before he'd successfully installed himself as governor and clinched a political

BELOW: The map view highlights points of interest and special resources in each territory.

FOUR HOUSES *Who you'll be playing as, and scheming against, in* Dune: Spice Wars

ATREIDES

Leader: Duke Leto Atreides

Key strengths/ weaknesses: Can peacefully annex territories, but cannot pillage neutral villages.

If you want to prioritise politics over warfare, Atreides is the faction to play as.

HARKONNEN

Leader: Baron Vladimir Harkonnen

Key strengths/ weaknesses: Can use Oppression ability on villages, but loses resource production without active militia.

Nobody likes you, but oppressing villages gets results, strengthening your army and bolstering your stable of spies.

THE FREMEN

Leader: Liet Kynes

Key strengths/ weaknesses: Slower military supply drain, but limited access to political Landsraad.

Expert desert warriors, the Fremen are largely excluded from politics but can ally with independent sects around the map to gain authority.

THE SMUGGLERS

Leader: Esmar Tuek

Key strengths/ weaknesses: Can place underworld headquarters in enemy villages, but limited access to political Landsraad.

Money rules everything, including your army of pricey but powerful and plentiful mercenaries.

victory. But I was at least able to train up an army of Fedaykin warriors powerful enough to stomp Baron Harkonnen's troops and destroy his heavily fortified capital after an extended siege.

That was satisfying, but you can't think too hard about how *Spice Wars* has grafted Dune onto the framework (and budget) of a basic 4X. You can place buildings on a small grid within each territory, but their location is mostly meaningless. Outside of a few unique units and tech tree differences, the Fremen mostly play like the Atreides, who aren't all that different from the Harkonnen, and so on. Should the Fremen really be conquering territories, manufacturing whatever the heck plascrete is, and paying spice taxes to the Spacing Guild?

Vidal knows there's still work to do there. "One of the things we liked from the old board game from the '90s was the asymmetry," he says. "We thought it would be interesting to have a game where factions play very differently. At some point we wanted to push that – too much, to be honest. We'd have one game per faction, almost... the asymmetry of the factions was quite important for us. We want to push that further as we develop."

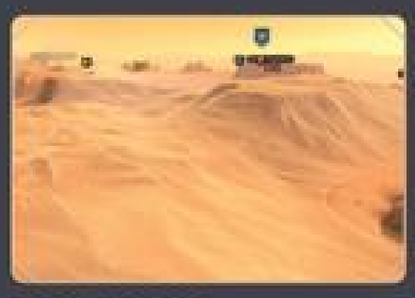
I SPY

Early Access will give *Spice Wars* the opportunity to root itself more deeply in Dune's universe, and Shiro Games already has some ideas. Currently when you start a game you pick two councillors who give you certain perks – House Atreides' Gurney Halleck unlocks a special military unit, for example – but they're more mechanic than character, with no dialogue or interactivity once the game begins. Vidal wants to change that, though this plan is still tentative.

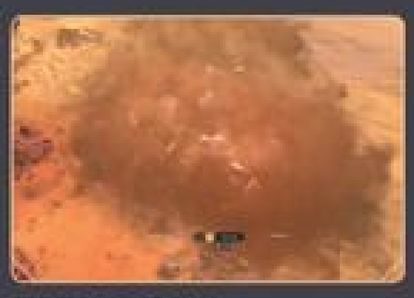
"The plan right now is two of them will be warrior-type councillors, and they'll be actual units you can use in the game, so you'd probably have Duncan Idaho running into the desert and fighting with his troops," he says. "Two would be unique agents you could

WASTELAND HAZARDS

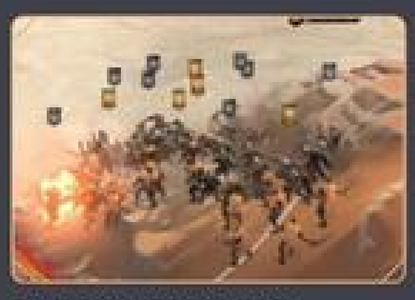
The other factions aren't the only threat on Arrakis



DEEP DESERT
This stretch of sand will quickly sap the supplies, and then health, of any lesser warriors attempting to cross it on foot.



SANDSTORMS
Massive storm clouds roam the map, destroying ornithopters and armies outside protective villages.



FREMEN SIETCHES
Independent Fremen communes will send raiding parties at you unless you form an alliance by trading water.

SANDWORMS
Leave troops outside a village too long, especially in combat, and a worm will arrive to swallow your entire army.

use for spying, and they'll have unit powers as well, so they'll be more important to the player."

Shiro's ideas for a campaign mode are also still open based on what players want. "We have ideas to do different types of campaigns: some very narrative driven, some more open and systems based. It could take very different forms. The campaign is somewhere we have room for more literary stuff."

There are other plans for instilling Arrakis with more life, like rebel war bands crossing the sands to attack your villages and even bigger coriolis sandstorms, like the one Paul Atreides escapes in after fleeing the Harkonnen. Vidal wants players in *Spice Wars* to feel less in control on the untamed Arrakis than they do in a game like *Civilization*. There are likewise plans to deepen existing mechanics, like adding more proximity bonuses between buildings to give their placement on the map a bit more meaning.

"We're also looking at the late game right now," he says. "It works, but it's a bit too bland for our taste. We want to add something, maybe starports and starships, though they'd be in the air. Something you unlock in maybe the last third of the game, and that opens up more options that are unique to the endgame. We wanted to have that for Early Access, but there's only so much time in the day."

ABOVE: *Spice Wars* looks quite nice despite being one big desert.

GET REAL-TIME

Despite playing with the same balance of exploration, expansion, exploitation and extermination as *Civilization* or *Total War*, *Spice Wars* is a more focused game, with supply limits keeping your armies small and water ever in demand. Their objectives of domination may be the same but the scale and stakes feel more intimate, even if the universe is ostensibly on the line here.

"We wanted to keep those very interactive and visual aspects of an RTS, where what you build matters and it's there and can be attacked and destroyed," Vidal says. "*Stellaris*, for example, is very abstract, and most people actually play from the map view and don't ever go into the planetary systems, because you don't need to. We didn't want that for this game. That led to a lot of decisions [focused on] making things look real and placed in the world."

After the scale of *Total War*'s combat, I did like zooming in on my small units of Fremen warriors and micromanaging them in battle, watching them chew through Harkonnen soldiers and level up. Likewise there was a real tension sending them across a sandy wasteland and watching their supply meters ticking down the longer they stay outside my territory. Single units in *Total War* are meaningless, but I was heartbroken when two of my veterans were swallowed up by a sandworm while running for the rocky safety of a settlement. *Spice Wars* is already able to tell some of these small stories effectively, even without a campaign.

"If I want to talk about it with my friends who play the game afterwards, that's a good sign," Vidal says. "That's true for many games, but especially for 4X games. It must tell stories, even if there's no direct narration."

"WE HAVE IDEAS TO DO DIFFERENT TYPES OF CAMPAIGNS"

A year from now I hope *Spice Wars* is weaving in scripted narration, too, and using characters to give each faction rather more life. In Herbert's original novel, Muad'Dib says, "There is no escape – we pay for the violence of our ancestors." I'm not saying that quote alone is justification for *Spice Wars* stealing *Old World*'s generational heir system and complex relationships, but, well, is Dune truly Dune without knife duels settling everything from the fate of the universe to petty grudges? ■

SANDS OF TIME

A masterful sci-fi adaptation that shaped the future of the RTS? That would be **DUNE II**

By Will Freeman

When Frank Herbert began to pen the first Dune novel, video games were in an entirely nascent form. In 1965, when his iconic sci-fi work was published, a mere handful of games had been created, often for looming mainframe computers as research projects.

However, in starting to build out his world of interstellar feudal conflict, political drama, and the desperate mining of a powerful drug called 'melange' or 'spice', Herbert set in motion a series of events that would have a profound influence over the real-time strategy genre, and even the wider gaming landscape.

Herbert's tale initially appeared as a run of serialised pieces in Analog Science Fiction and Fact magazine. Soon after, Dune was released as a novel, which would in turn inspire numerous sequels written by Herbert and later his son. Such was the first book's popularity and influence on science fiction that it inevitably attracted the attention of Hollywood. Though, as it turned out, the vast and intricate setting Herbert had spun from words was far from easy to adapt into a celluloid release. Over the years Dune movies have been panned and canned, with David Lynch even disowning his infamous 1984 film version. In fact, it was 2021 by the time a Dune movie arrived that most felt was worthy, with director Denis Villeneuve at the helm.

A TALE OF TWO DUNES

Games, meanwhile – with all their interactivity, intricacy, and freedom from linear storytelling – proved to be a little more suitable when it came to communicating the spirit and tone of Herbert's creation.

Not that the effort to make a *Dune* game started flawlessly. Developer Cryo's MS-DOS title *Dune* was plagued by a hellish development. Thanks to a somewhat bewildering series of contract complexities, divided opinions, publisher acquisitions and other business shenanigans, it was almost cancelled. The story goes that when Cryo's game looked certain to derail from its production schedule, Virgin turned to Las Vegas outfit Westwood Studios to take its own shot at crafting a title based on both Herbert's novel and Lynch's film. Cryo then convinced the publisher to proceed with their release, and the quietly brilliant blend of adventure and strategy made it to the public via Virgin in 1992.

ABOVE: RTSes have come far – yet *Dune II* set so much in place 30 years ago.

But then something extraordinary happened. Virgin proceeded in publishing Westwood's version – also in 1992, as *Dune II: Battle for Arrakis* (or *Dune II: The Building of a Dynasty* in the US). Was it a sequel? It might have been presented as such, but the games took very different approaches. *Dune II*, perhaps, just made it over the finish line in second place.

Regardless, Westwood's game became a very important release. It wasn't the first real-time strategy title, but confidently built on the groundwork laid by RTS and MOBA genre pioneer *Herzog Zwei*.

THE ARCADE RTS

Westwood reportedly openly credited Technosoft's curious blend of 2D action game and strategy title as a core inspiration over *Dune II*. A Mega Drive exclusive released in 1989,

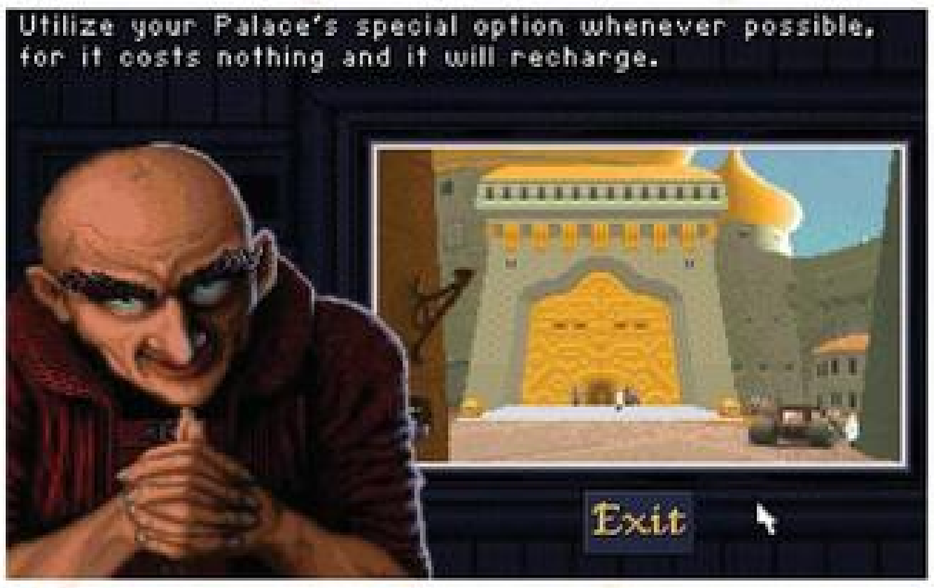
Herzog Zwei might best be described as a 'proto-RTS', and presented the case for bringing real-time elements into strategy games. Technosoft's devs gracefully explored ideas like real-time resource management and unit commands, while its core concept was focused on advancing towards the heart of enemy territory. Crucially, though, players interacted with the game's systems by piloting a single starfighter, shmup style. *Herzog Zwei* remained deeply rooted in conventions from arcade gaming.

As such, it was *Dune II* that really established what an RTS could be, popularising the genre and establishing design conventions that were eagerly embraced by the teams that would build seminal works such *Age of Empires*, the mighty *Warcraft* franchise, *Total Annihilation*, and Westwood's own *Command & Conquer* series. In turn, those games and others shaped by *Dune II* would have significant roles to play in progressing the RTS form, and even the emergence of contemporary online fandoms, the notion of massively multiplayer online games, titles maintained as live entities and even the snowballing phenomenon that is esports. Let's be clear. It would be a substantial overstatement to credit *Dune II* with directly inspiring what esports has become; and yet Westwood created something that has a tremendous legacy, and a role to play in so many of the trends currently at the front and centre of what the modern gaming medium is.

PAPER PROTOTYPING

Dune II's impact on gaming is founded in a simple notion. Westwood made a very good, truly innovative game with some brilliantly rewarding, elegant systems at its heart. Yet it was about more than that, and Herbert himself likely deserves a good dose of credit. The author wrote into being a world that had all the constituent parts of an RTS; warring factions, coveted resources, distinct rival cultures, political tensions, competition, and an obsession with harvesting the supplies of claimed lands.

Westwood, in turn, spotted an opportunity to build a game that captured the heart of what Dune was; not its winding narrative, or host of characters, but its very essence. While Cryo's game loosely followed



ABOVE: Granting opposing sides distinct abilities and options set a standard for the RTS genre.

the narrative of the book and film, and was clearly informed by a sincere love of Herbert's work, Westwood stripped the plot right back and concentrated on the premise of controlling the territory of the planet Arrakis; the only place in Dune's fictional universe where the all important spice can be found.

Some years earlier Westwood producer Brett Sperry was at work on the Dungeons & Dragons branded RPG *Eye of the Beholder*. An idea formed in his head, and he couldn't shake it. He wondered how he could replicate *Eye of the Beholder*'s real-time action in a game constrained to a singular top-down viewpoint, with more of an emphasis on strategy and resource management. He and his peers even worked on a scattering of prototypes. But it was talk of working on a *Dune* title for Virgin that finally let Sperry fully develop his concept for a new type of game.

The combination of Herbert's meticulously constructed world and Sperry's notion that real-time and strategy could be blended formed a perfect combination. The novel gave Westwood all the elements for a real-time strategy game that greatly elaborated on Technosoft's effort

HOUSE RULES

Dune II pits three Houses – Atreides, Harkonnen, and Ordos – against one another in a battle to claim the profitable lands of Arrakis. Having picked a side, you are initially tasked with missions that guide establishing a base of operations on the famously sandy planet, while mastering spice harvesting and combat. Over time the focus shifts to attacking enemy infrastructure and territory, gradually advancing on the ultimate prize of occupying all of Arrakis. The result was a compact RTS that bristled with pace and shifts in dynamic – and a game that felt very much like an extension to the original novel.

FAR LEFT: *Dune II*'s visuals haven't aged perfectly, but its tight presentation made it a joy to play.

BELOW: Aside from pioneering the RTS genre, *Dune II* also featured rather lovely pixel art.

DUNE BUDDIES

Dune II's *sequels and remakes*

DUNE 2000 1998
A partial remake and semi-sequel, *Dune 2000* took much inspiration from *Command & Conquer*, but failed to rival *Dune II*'s quality.

EMPEROR: BATTLE FOR DUNE 2001
Dune 2000's direct sequel complied to Westwood's RTS template. It wasn't perfect, yet had capacity for fun.

DUNE LEGACY 2003
One of several fan remakes, *Dune Legacy* gently modernises *Dune II*'s systems while endeavouring to preserve the gameplay.

Dune II's real accomplishment, though, was in introducing so many new elements that worked cohesively together. There was the asymmetrical nature of the different sides' available military hardware and units, and the option to establish your starting base anywhere of your choosing. Players adored the ability to gather resources to enable unit building, and the system of structural dependencies. The latter ensured that to create the most desirable units, you have to go through a chain of constructions, starting with the most basic buildings. The 1993 Mega Drive port would even present an early example of the context sensitive cursor.

OVER TIME THE FOCUS SHIFTS TO ATTACKING ENEMY INFRASTRUCTURE

In a single game, Westwood had taken the RTS genre forward an astronomical distance, and set a template that still defines the form today. The elements it brought together have become stalwarts in all kinds of other genres, cropping up in MOBAs, MMORPGs, city-builders, action RPGs, and so many other forms.

Strangely, while genre-devotees know and cherish what *Dune II* is, it has never become a household name like *Warcraft*. That may change, though, with *Dune: Spice Wars* recently released to a bounty of praise. And yet *Dune II* might well still be the most fitting Dune adaptation there is, because it places you in Herbert's world, rather than his story. And that world, it turned out, was the perfect blueprint for the most influential RTS there has ever been. ■

NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
August 23	Volition	Deep Silver	saintsrow.com

SAINTS ROW

A more grounded take, but don't worry: it's still extremely silly

The boss of the Saints is speeding through Santo Ileso, utterly disregarding numerous laws of the road. There's the usual reckless driving and ignoring traffic lights, of course, but more notable is what she's dragging along behind her car: a portaloo. An occupied portaloo at that.

She's softening up the unfortunate crook inside the loo so she can find out where his pals are holding a member of her gang. They were meant to be enjoying an evening of telenovelas, but he went and got himself kidnapped by the Idols, one of the Saints' rivals. And while this is a scripted mission, the winch is something you can attach to most vehicles outside of this scenario. Choppers can similarly pick stuff up and fly off with it. If *Just Cause* has taught us anything, it's that tethering stuff to vehicles always leads to hilarity.

Volition has made it clear that with a new gang comes a change in tone, as well as a more considered approach to your inner circle and the relationships you develop with them. There's more than a hint of Fast & Furious' obsession with family, and like that series there is some straight-faced sincerity amid the wingsuit stunts – you can bounce off pedestrians to get more air – and explosive heists. So it's still a farce, but one with emotional grounding and internal logic.

"It doesn't matter how absurd a thing is if it has an emotional truth underneath it," says lead mission writer Jeremy Bernstein. "That final mission [in the demo], Kevin's missing, the Idols are gonna kill him, and that's serious, and it feels serious to you and it feels serious to the Boss, to the character that you're playing. So the things you do to rescue him, beating the guy's head against the jukebox and dragging him around in the porta-potty, those are absurdist, but the emotionality behind it, that grounding, that character drive, that's all very real. You're trying to find your friend. That gives you this great balance where you are doing absurd things, but it feels like it matters. Absurdism for the sake of absurdism, that's where everything feels fluffy and doesn't feel like anything really means anything."

We're not talking superheroes, aliens and trips to Hell, but the shenanigans still survive. Insurance Fraud, where you get tossed around like a ragdoll for a quick buck, is still here, as is Mayhem, letting you blow off some steam by blowing everything up. What grounded means for *Saints Row*, then, is not a dismissal of the antics that made it stand out from *GTA*, but an attempt to make it coherent.

VOLITION HAS MADE IT CLEAR THAT WITH A NEW GANG COMES A CHANGE IN TONE

NEW INFO

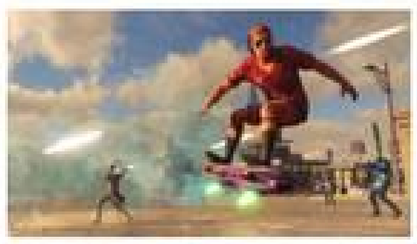
JOB SEARCH

You can see this in how it presents its over-the-top activities. Things like Insurance Fraud and Mayhem are now connected to criminal ventures: businesses you open across the city in an attempt to take it over. From your war table in your customisable HQ, you can see the whole city and decide where to plonk down your new illicit businesses, in turn unlocking new activities and rewards.

So you get your "fun and wacky" situations, as systems designer Damien Allen puts it, but they still "make sense of this criminal empire". There's a point to the weird stuff you're doing. And there's more to do beyond these criminal ventures.

"There's other opportunities that aren't necessarily tied to a building that the Saints can get into," Allen says. "And they have just as much variety as the buildings as to what those activities are, focusing on different abilities and mechanics and things we have throughout the game. If you have a favourite thing to do, there's probably an activity that allows you to express that."

Saints Row



CRIMINAL OUTFIT

And that's far from the only way of expressing yourself. A liberating amount of customisation has always been *Saint Row*'s deal, so it shouldn't come as a surprise that this remains true in the reboot. Volition released a trailer showcasing character customisation a wee while ago, and this time I got to see it in action as the developer switched between various versions of the Boss.

As well as being able to make plenty of cosmetic changes to your vehicles, there's also some handy practical enhancements, including an ejector seat that's perfect if you fancy switching from driving to gliding in your wingsuit, boosts that give you a nice rush of speed, and the aforementioned winch. This goes for weapons, too, so you can change their appearance or enhance them, like turning a regular pistol into a machine pistol. The big new feature, however, is being able to swap their look for that of another weapon. We got transmogs, baby!

"There are going to be some limitations," explains Kenzie Lindgren, associate UX designer, "But there's going to be a certain set of, let's say, melee weapons, and you have your starter... but if you don't like the look of it, you can go and change the visual effect that's on it."

It's another excuse to hit the shops or hunt down other opportunities for weapon rewards. And whether you're tweaking your Boss, your vehicle or your weapon "there's a lot of weird shit", Lindgren promises. She teases that there's a lot of fun stuff you can stick on food trucks specifically, and Allen adds that you can stick bits of cardboard on some of the cars "just because". I'm rather partial to the big foam fingers, which I'm sure I'll be using with the trasmog system a lot.

HOSTILE TAKEOVER

One thing Volition appears to be taking a bit more seriously this time are the shootouts. The previous games didn't offer a lot of structure to the fights, instead just giving you plenty of enemies to mop up with your increasingly devastating arsenal. The reboot's approach keeps the chaos, but foes seem like tougher customers, with more smarts and abilities tied to their role and what gang they belong to, beyond just filling your soft body with lots of bullets.

"[The gangs] each feel very unique," says Allen. "They each feel like you know when you're fighting Panteros, you know when you're fighting Marshalls and Idols. The way they arrive and what you need to fight them feels very different, so it gives more of a sense of a personality to each of the enemy factions and that your strategies need to change. You still have tons of weapons and tons of variety, and you can move and shoot, and shoot from the hip. But you have to think differently than you did in the past."

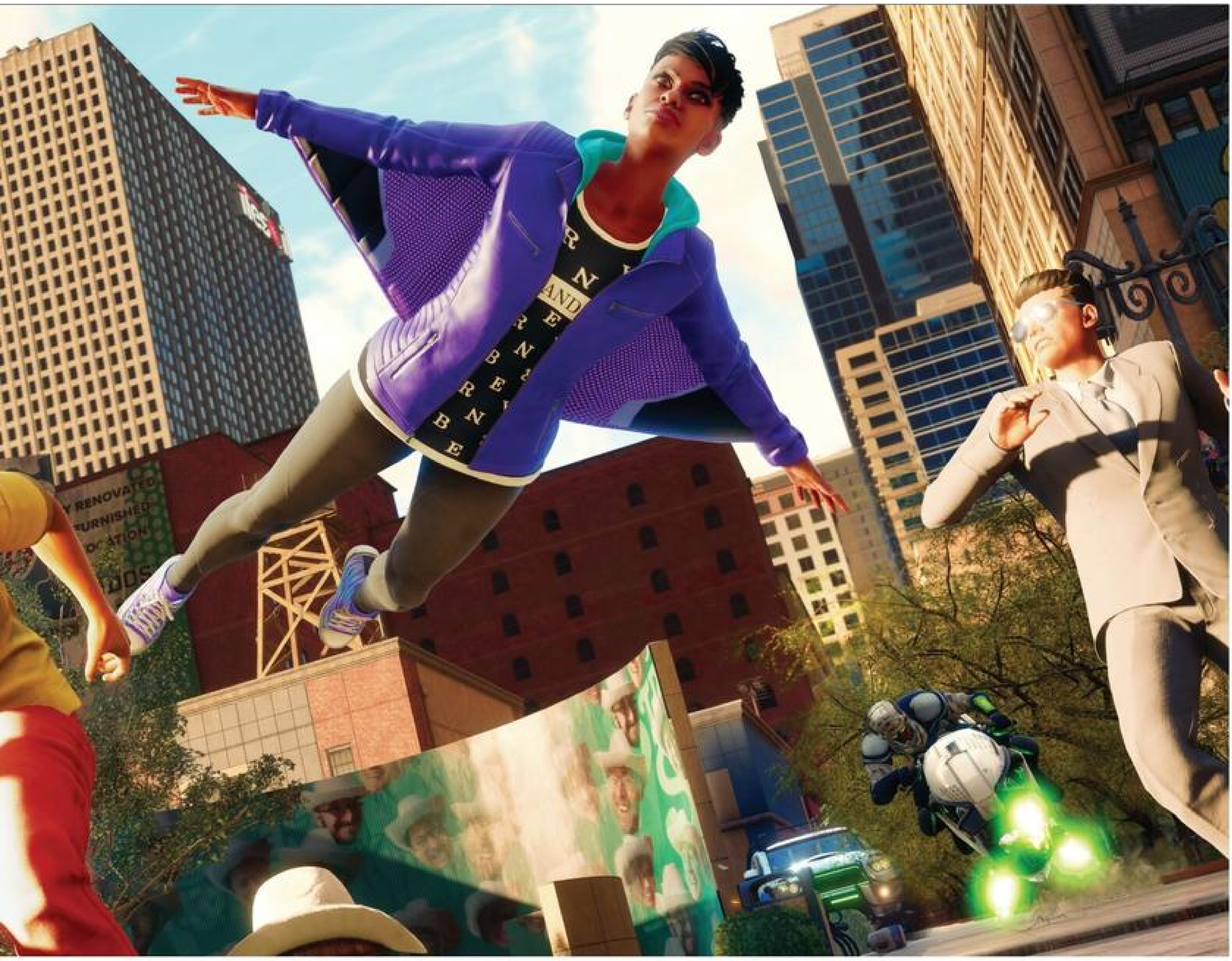
In attempting to show off the breadth of *Saints Row*, Volition doesn't offer much time to dig into the characters and clams up whenever any story questions are raised. It's hard to get a feel for them, then, and the sequences with the gang bantering are some of the weaker parts of the demo, where they used to be a highlight. I did enjoy the Boss and her pal being upset about missing their telenovela date, however, and one mission's climax puts one of your mates in the spotlight when she commandeers a monster truck, rams it into a furnace and destroys a factory. Commendable. I can see myself growing to like them, but right now I'm still mourning the old gang.

The old cliché of the city being part of the cast is alive and well, but at least with *Saints Row* it's a cliché Volition has earned the right to use, especially after the eccentric, lively cities of *3* and *4*. Each district of Santo Ileso is meant to have its own vibe and NPCs, not just wandering the streets but getting into trouble with the law or just hanging out listening to a musical performance. Possibly from you. Of the 100 emotes you can bust out, you've got musical options, and ones that let you keep walking, so you can strut down the street while strumming your guitar as people dance and applaud. Around here this would inspire a mob to chase you and smash your instrument over your head, so this is a nice change.

Nothing in my demo really surprised me, which is strange for a reboot. But it did absolutely seem like *Saints Row*. It couldn't be any other game. That's fine with me – there isn't a *Saints Row* I don't like – and no doubt this will be good news for faithful fans. But any reinvention needs something bold and new to showcase the new direction, and *Saints Row* doesn't seem to have that yet.

Fraser Brown

THE OLD CLICHÉ OF THE CITY BEING PART OF THE CAST IS ALIVE AND WELL



ABOVE: With wingsuits and tethers, the game feels influenced by the chaos of *Just Cause*.

FAR LEFT: The Boss does not respect the Man.

Disney Dreamlight Valley

ABOVE: Oh boy! Looks like the valley's in trouble!

RIGHT: Let's go to the beach-each.

NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
Summer	Gameloft	In-house	disneydreamlightvalley.com

DISNEY DREAMLIGHT VALLEY

It Disney get any better than this

Having grown up in the era of Disney's film renaissance, I am well versed in all things mouse. I know the songs by heart, have watched every animated movie, and have visited Disneyworld more times than an adult probably should. But what's never really jelled with me is Disney games – the last one I enjoyed was *Toy Story 2* for the PlayStation. Until now.

Disney Dreamlight Valley feels like a Disney game created just for me. It combines all the things I love most in games: life-sim, character customisation, narrative-driven stories, and very cute critters. There's faithful voice acting and music throughout, and many easter eggs for Disneyphiles to find. It's a Disney game made with millennials in mind, featuring beloved characters from the '90s films alongside modern favourites like Elsa and Moana.

After Dreamlight Valley's mysterious ruler disappeared, the Forgetting began. Ghastly Night Thorns grew all over the land, and some of the valley's inhabitants retreated into the Dream Castle, with most losing their memories. It's up to you to restore the memories of its inhabitants.

There's no combat in *Dreamlight Valley* – rather your magic enables you to clear away the Night Thorns and complete quests via helping various characters. Assisting characters and completing their quests is also the way to unlock Royal Tools – such as the fishing rod and shovel – which will help you on your way to saving the valley, as well as increasing your friendship level to unlock unique rewards.

Alongside an adventure-led main story, there are plenty of sidequests to complete. Some of the most interesting puzzles can be found behind the doors in the Dream Castle. Completing these puzzles by using your Royal Tools will unlock even more characters who will rejoin you in the valley.

The sandbox elements of *Dreamlight Valley* have you cooking, farming, collecting resources, and more. To unlock all the Royal Tools, you'll need to progress through the story and accept the quests from your new Disney friends. As you unlock more tools, you'll access more doors in the Dream Castle. Of course, the tools aren't just related to quests – you can use them in the sandbox, too.

AFTER DREAMLIGHT VALLEY'S RULER DISAPPEARED, THE FORGETTING BEGAN

FIRST LOOK

SWEET DREAMS

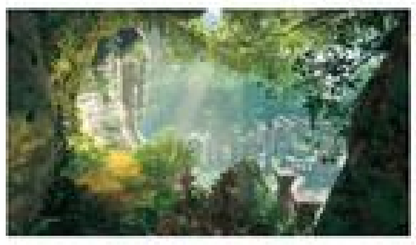
The real gem of *Dreamlight Valley* is the landscaping. One key tenet of the game is self-expression, whether that's with a snazzy custom outfit or a total rearrangement of one of the map's themed zones. The aim isn't to become a Disney princess, but to express your love of Disney in your own way. You'll unlock the bulk of the furniture and props by completing quests and there are over 1,000 customisation options, so don't worry about becoming bored with your look.

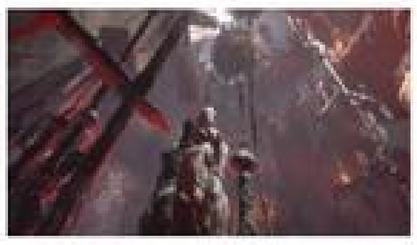
Each character has their own agenda, making their feelings known towards the Night Thorns strewn across the land and engaging in activities they enjoy, like fishing. You can even make friends with the animals found in each new area and, once tamed, they'll follow you around. Don't pretend you don't want a horde of cute animals following you at all times.

Gameloft plans on updating *Dreamlight Valley* beyond its planned release in 2023, adding more adventures and items. Better still, it'll be free-to-play at launch. Having the choice to solve some puzzles, decorate my house and go off on a quest sets it apart from its life-sim counterparts. If you've fallen out of love with *Animal Crossing* and the like, you'll be as obsessed with *Dreamlight Valley* as I was with We Don't Talk About Bruno.

Lauren Aitken

The Lord of the Rings: Gollum





NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
Autumn	Daedalic Entertainment	In-house, Nacon	bit.ly/3tdzHuT

THE LORD OF THE RINGS: GOLLUM

A stealth adventure with an identity crisis

The *Lord of the Rings: Gollum* seems to share its titular character's split personality. In a 20-minute remote preview, I got to see the Gollum: contextual stealth takedowns, ledge shimmying, and 'Gollum vision', but also the Smeagol: an open-ended, combat-free platforming puzzle. Which one will win out is hard to say.

The demo begins in one of the game's two primary locations: Mordor. I was a bit uncertain before the demo at how well this grey and red hellscape could carry half of a game, but Daedalic's done a decent job injecting more colour: some yellow sulphur and even a bit of greenery that differentiates its Mordor from Peter Jackson's portrayal.

The Mordor gameplay mostly covers the tutorial, so it's possible the stealth system could have more tricks up its sleeve, but I'm unmoved so far. On approach to an orc fortress, Gollum activates Gollum Vision to highlight enemies, a feature familiar to anyone who's played a triple-A game in the past ten years. Gollum scurries from cover to cover, climbs up a high ledge to avoid a guardpost, and kills an orcish sentry with a quick stealth takedown.

It all gives me an impression of a fully standardised, triple-A form of stealth-action gameplay, and I don't have particularly high hopes for this aspect of the game. The Mordor portion concludes with the reveal of Gollum vs Smeagol moral choices. I don't know if there's an explicit morality meter, but *LotR: Gollum* does track these choices and it will have an effect on story beats.

But to what end? The presenters also confirmed that the main plot points of the game are set in stone, the curse of prequels everywhere, raising unfortunate questions of how *Gollum* justifies itself. I'm not sold on the awful little hobbit's 'star power', as it were. As iconic as Andy Serkis' portrayal was, even that interpretation wouldn't make for a compelling lead for an entire game, and this isn't Andy Serkis we're talking about here – just a decent impersonation. The presenters cite Gollum and Smeagol's crosstalk as a way to fill silence during gameplay and more organically deliver the sort of, "Hmm, I guess this is where I go next," barks we've come to expect from our chatty videogame protagonists, but the schtick is already wearing on me by the mid-point of the presentation.

A FULLY STANDARDISED, TRIPLE-A FORM OF STEALTH-ACTION GAMEPLAY

SILVER LININGS

NEW INFO

The second portion of the demo is a bit more promising. The court of Thranduil forms the other primary setting for the game, and I'm pretty taken with its look, something halfway between the elven environments of Peter Jackson's movies and the Dreaming City from *Destiny 2*.

This portion also doesn't have any enemy characters, instead showing Gollum navigating the elf king's empty bedchamber. It's the sort of open-ended platforming puzzle I really enjoyed in *Prince of Persia: the Sands of Time*, with the player being left to chart a path through a cavernous fantasy obstacle course. Gollum has to climb to the heights of the massive chamber, jumping from handholds on a moving orrery high above the floor. This part of the *Gollum* demo stirs something in me, striking me as a game I might actually want to play.

And then the demo ends. After years of just existing as a name and pre-rendered concept footage, *Gollum*'s first look was divided between visions of an uninspired stealth-action game and an intriguing throwback platformer. It's difficult to tell which way the final game is going to lean, but I come away from its public reveal unenthused.

Ted Litchfield

Painterly vistas like this give me hope for the Mordor portions.

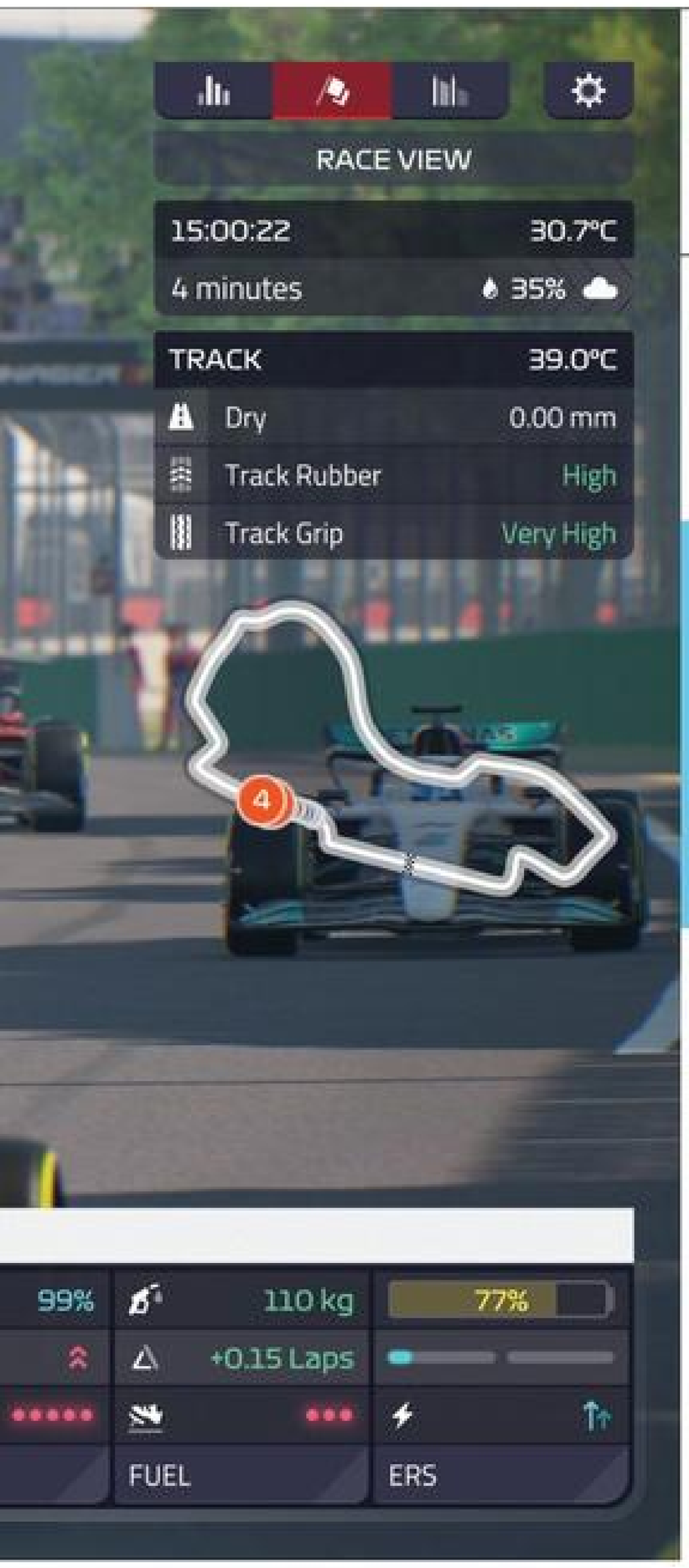
ABOVE: I'm still not sold on *Gollum*'s stealth gameplay.

LEFT: I'm always a sucker for overgrown elven ruins.

F1 Manager 22

ABOVE: If you're an F1 fan, you'll quickly get lost in the minutae.

RIGHT: The level of granularity is both intimidating and impressive.



NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
August 25	Frontier Developments	In-house	f1manager.com

F1 MANAGER 22

An irresistible chance to undo Binotto's mistakes

What Ferrari wouldn't do for a pause button this season. Each race, Leclerc and Sainz start from the front of the grid and demonstrate a pace advantage over everyone else for about 20 laps... and then suffer a new variety of disaster. The only throughline between these upsets is that the people in pit lane wish they'd done the last five minutes differently.

That's what *F1 Manager 22* offers – the experience of being a team principal in motorsport's most prestigious category, with all the pressure and poring over technical minutiae that comes with it – and a pause button.

Going hands on with *F1 Manager 22*, what's striking is not just how advantageous the pause button is, but how real-world time melts away while you deliberate over tyre compounds. I wouldn't dream of whacking the race distance up to 100% in Codemasters' *F1* games, but here it didn't even occur to me to speed up time and condense the race.

That comes down to what's actually being asked of you in the two games. In *F1 22*, you're driving laps within a few tenths of each other for an hour and a half. Here you're clicking away on the mouse like a *StarCraft* player, controlling the pace, engine mode, ERS deployment, and pit strategy of two drivers, lap by lap, corner by corner. You're watching how their tyres are degrading based on wear projections. You're considering strategy changes. It's a lot of clicking. And it's utterly engrossing.

DESPITE THE PAUSE BUTTON I SCREWED BOTH MY DRIVERS ON STRATEGY

My particular hands-on takes place at Baku, and filling in for Alpine team principal Otmar Szafnauer I set Ocon on an aggressive two-stop strategy, two lots of soft compound then one medium so he can gun it all race long. For Fernando Alonso, the wily old veteran starting two places behind him in P11, I set a one-stop, medium then hard, and pray for a safety car that lets both drivers leapfrog the field in a well-timed pit stop.

IN IN IN...

I get it, too. On lap 15 Yuki Tsunoda out-brakes himself going into turn one while battling with Zhou Guanyu and beaches his Alpha Tauri on the track. The safety car's out for four laps, giving me time to pit both drivers without having to double-stack them, and even enough time to work out a new strategy for Ocon.

That gives us a huge jump in track position – the rest of the pack elects not to pit under the safety car, so when they start to pit later from a compressed pack, we rise up to P4 and P7. The feeling is something between setting a fastest lap in *F1 2021* and securing a wily science victory in *Civilization*.

PLAYED IT

By the chequered flag, my inexperience shows. Despite the pause button I screwed both my drivers on strategy and took too much out of their tyres, so their last stints are an exercise in sinking through the field like a particularly aerodynamic pebble in a pond. P14 for Ocon and P11 for Alonso.

Quite a long time has passed while I've been watching graphs of tyre deg slowly trend downwards and manually adjusting ERS levels every lap. It's telling that Frontier's done a fine job, because I've lost track of it completely.

Between races, I suspect there's still some user interface refining to be done. Fitting newly manufactured parts to cars feels like it requires two or three sub-menus more than it should in the current build, and it's not the only important interaction hidden away in the menus.

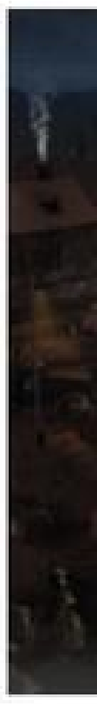
But that's not a big worry, this far out from release. What's important is that Frontier's found exactly where the interest and adrenaline are in motorsport's hardest job, and it's a job I'll quickly rack up hundreds of hours in.

Phil Iwaniuk

Gerda: A Flame in Winter

ABOVE: Gerda works as a nurse in her small town.

RIGHT: Tense conversations are common.



NEED TO KNOW

RELEASE
September 1

DEVELOPER
PortaPlay Gaming Aps

PUBLISHER
DONTNOD Entertainment

LINK
bit.ly/3Q2uOyz

GERDA: A FLAME IN WINTER

An important story muddled by numbers

This WWII adventure game has arrived at a strange time. While the Ukraine-Russia conflict continues, it serves to reinforce that Europe is not immune to tragic and brutal conflict – and, in fact, it wasn't that long ago that the world suffered through two World Wars.

Gerda: A Flame in Winter is the story of an ordinary person trying their best when war surrounds them, how conflict on a global scale affects the people attempting to live their day-to-day lives. You play the eponymous Gerda, a half-German, half-Danish nurse living on the Danish border between the two countries. This area is occupied by the Nazis. Your relationships become complicated as you're married to a Dane, but your father joins the Nazi party in the hope that supporting its politics leads to unity between Germany and Denmark.

Gerda finds herself in a difficult position between these two parts of her life. She supports the independence of her small town, and the Danish people. But through the game you can show kindness and sympathy to German soldiers or try to support your father despite his allegiance. Doing so, though, comes at a cost. Everything, and I mean everything, comes at a cost.

DIPLO-MATH-CY

The main gameplay in *Gerda* involves conversations directly influenced by numbered stats. You have Gerda's Compassion, Wit, and Insight ratings, her personal trust levels with individual people, and then her affiliation with the Danish and Germans. Years ago I played *Valiant Hearts*, a game set during WWI, which acted as a history lesson as much as it did an engaging point-and-click adventure. There were no major choices in *Valiant Hearts*; it was just a story and an insight into the lives of people trying to fight, survive, and aid war efforts. These stats in *Gerda* on the other hand require you to overthink every conversation, which I think may detract from the overall message of the game.

DECISIONS, DECISIONS

Even just in the demo I find myself having to make so many small choices that I become resigned to hurting the feelings of one person over another at every corner. Whether you're talking to a group of Germans or Danes, they'll always have different motives and opinions, which means every choice is a hard one. Or, as it may be, someone walks past as you have that conversation and your affiliation statistics are hurt instead. It becomes a practice in balancing the numbers on the right side of your screen more than it's about Gerda and leading her down a path you're proud of. Every choice could be a life or death situation in war-time Denmark, but already those choices feel too mechanical, and when things don't work out as you expected it's frustrating rather than affecting.

PLAYED IT

That blow is certainly softened by absolutely beautiful backdrops. A storybook style suits the wintery scenery perfectly. Camera movements are occasionally jarring, but the game has a real charm to it. I quickly warmed to the characters, sympathised with their hardships, and took solace in the little acts of kindness peppered into the game.

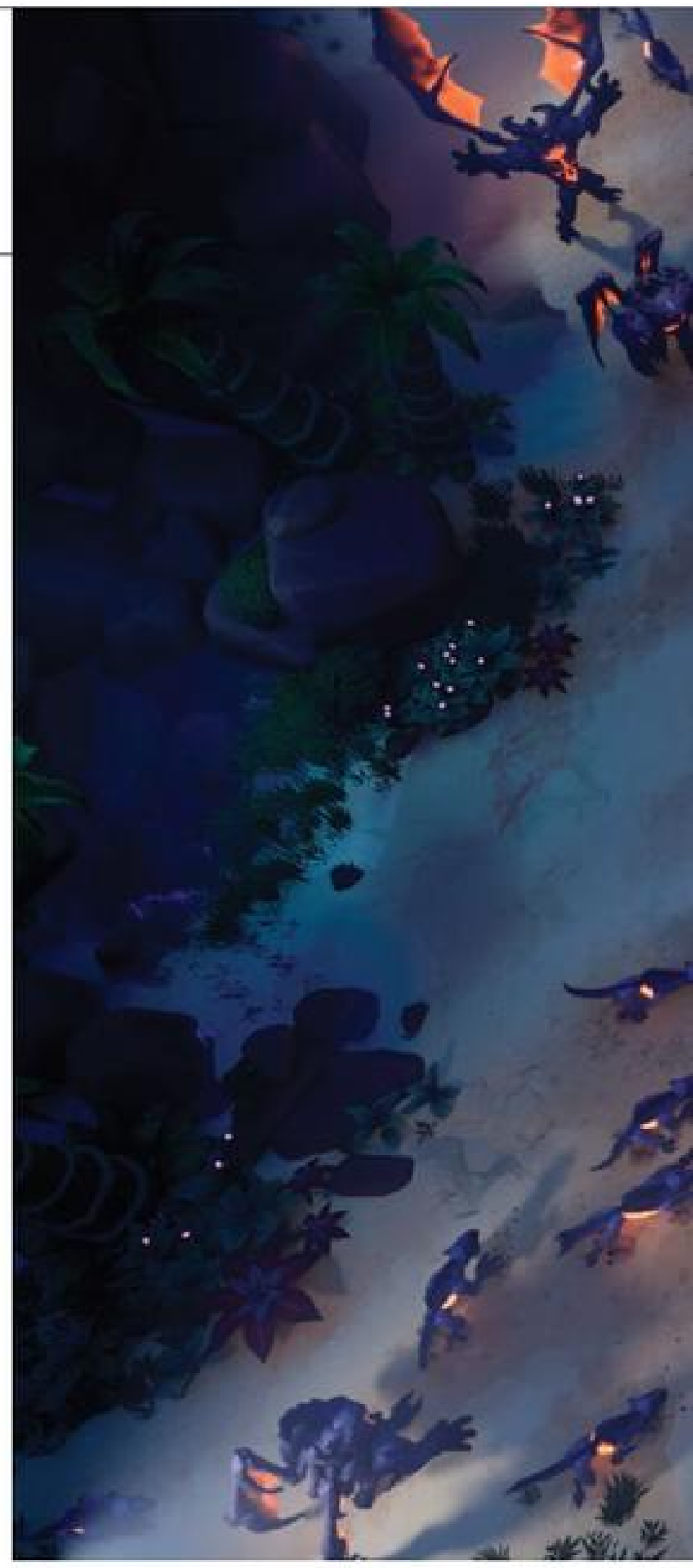
The story of *Gerda: A Flame in Winter* is no doubt an important one. It shows off a side of war we're not often exposed to: how people have to navigate small communities and family relationships drastically changed by the choices of far-away politicians. Whether the game will execute that story in the most elegant way is another matter, but I'm intrigued to see the final product this September.

Imogen Mellor

Gerda comes back home after training to be a nurse.

EVERY CHOICE COULD BE A LIFE OR DEATH SITUATION IN WAR-TIME DENMARK

Stormgate



NEED TO KNOW

RELEASE
TBC (beta test in 2023)

DEVELOPER
Frost Giant

PUBLISHER
In-house

LINK
playstormgate.com

STORMGATE

StarCraft II's devs reunite to make the RTS of their dreams

There's a world in which *Stormgate* doesn't exist. In that world, Bizarro Blizzard decided that *StarCraft II* was worthy of a sequel pronto. But in this world, the key minds behind *StarCraft II* got tired of waiting for the chance to maybe, someday, make *StarCraft III*. So they stopped waiting, and started making *Stormgate* instead.

It's easy to see how *Stormgate* began life as the dream of a *StarCraft* that would never be. It's a humans vs aliens RTS set in the future, but with a splash of fantasy. It promises to deliver classic 1v1 battles for competitive veterans. But generic brand *StarCraft* this is not: after checking off some must-have features, *Stormgate*'s developer actually seems focused on convincing players the genre isn't washed up just yet.

FIRST LOOK

"There's an opportunity to take RTS away from feeling like a solitary experience and into feeling like a more social experience," says Tim Morten, co-founder of Frost Giant and former production director on *StarCraft II*. Morten says that even when they added co-op to *StarCraft II*, players still often said the game felt lonely. "MOBAs, battle royale, even *Roblox*, these are social experiences, and RTS really had not kept up and evolved along that axis."

Campaigns will have co-op. *Stormgate*'s big new mode will be three player co-op, pitting players against AI with meta progression across matches. PvP multiplayer will have team-based competitive modes that focus on objectives, rather than deathmatch.

A STORM BREWING

"To give a good team experience, we have to do something different in those modes than just simply have three different 1v1 matches going on in the same map," says Tim Campbell. "I think that's been a flaw of team-based modes in traditional RTSes: you feel like you're playing siloed matches in the same game session."

Campbell is Frost Giant's other Tim: he founded the studio along with Morten and was the campaign lead on *Warcraft III*,. *Stormgate* began life as a series of coffee shop chats between the two Tims a few years ago; eventually their pent-up ideas for a new RTS could no longer be contained. Morten says that "there were so many clear opportunities to capitalize on the learnings that we got coming off the latter years of *StarCraft II*... I was really excited to see what we could do with that."

If any other indie studio had pitched me *Stormgate*, I'd call it impossibly ambitious. It's a small team building an RTS in the high fidelity Unreal Engine 5, trying to do campaigns, PvE co-op, and team-based multiplayer, classic 1v1 deathmatch with built-in esports tools, and multiple races with their own unique playstyles. Oh, and did I mention an editor? Yeah, in classic Blizzard fashion, it's doing that too, planning to hand their development tools over to the community to build their own levels.

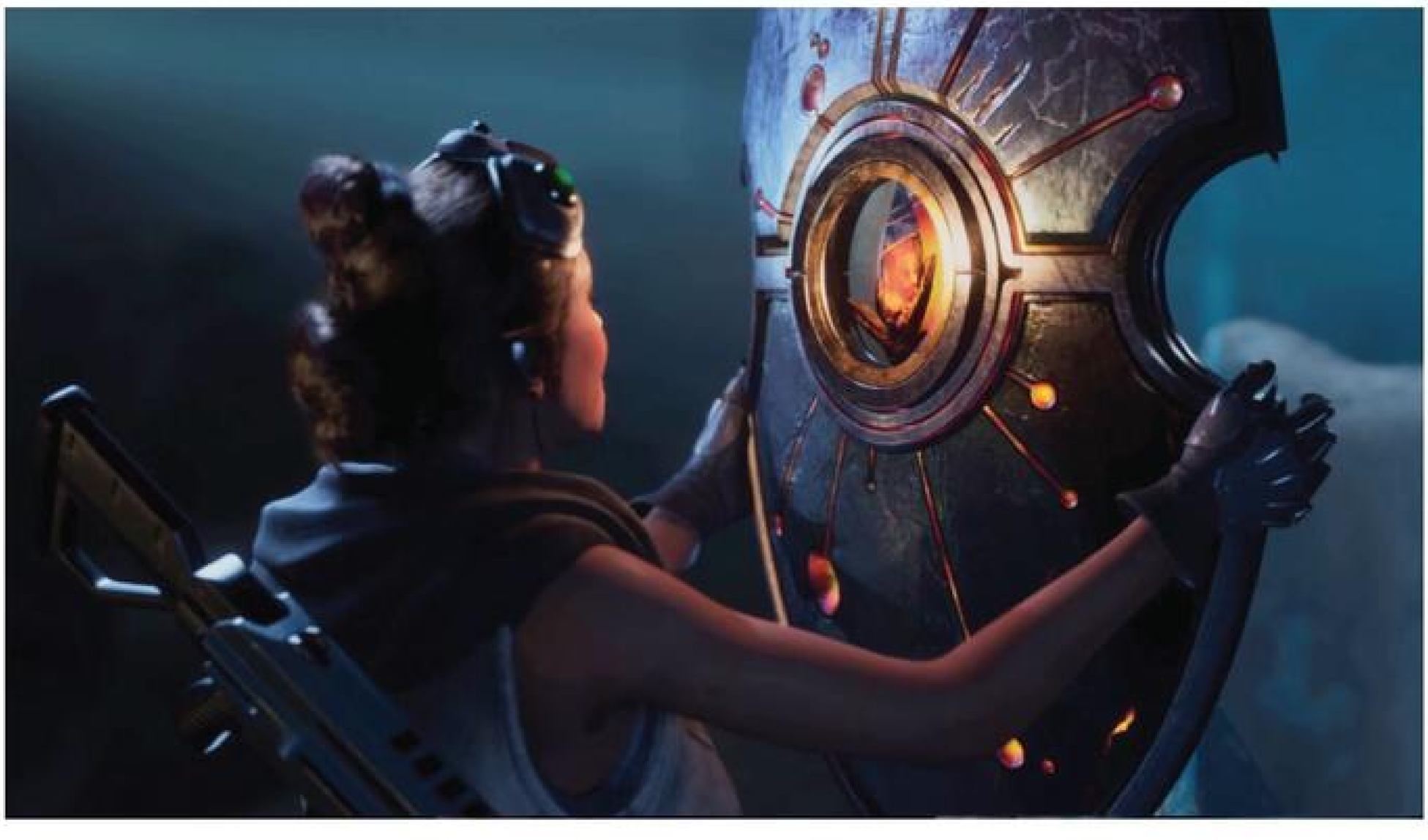
It's a lot. Maybe too much. But these are proven veterans – and they've got a practical plan for how to get *Stormgate* in players' hands next year. It'll start with a closed beta in 2023, then launch on Steam with an episodic model, which will let them expand the story and setting over time. And it'll be free-to-play, a key choice for any RTS trying to grab a new generation of players.

"I think the genre does well with providing a lot of room for players to master and improve their skill, but all of that depth can also feel daunting to a new player who's just stepping in," Campbell says. "We think we can really lean into that depth of experience, but improve around it."

Wes Fenlon

STORMGATE'S BIG NEW MODE WILL BE THREE PLAYER CO-OP, PITTING PLAYERS AGAINST AI

UE5 will allow Frost Giant to play around with dramatically different-sized units.



ABOVE: Are there mechs? You're damn right there are mechs.

LEFT: Expect *StarCraft*'s storytelling via characters to continue in some form here.

V Rising

The lesser-known 'vampire horse'.

NEED TO KNOW

DEVELOPER
Stunlock Studios

PUBLISHER
In-house

LINK
playvrising.com

V RISING

Build, battle, and bite in this vampiric survival game

Scavenge scraps from your surroundings. Hunt local fauna to keep yourself alive. Construct a shack to protect yourself from the elements. Fashion weapons from sticks and stones. Hide from the sunlight. Sleep in an ornate coffin. Drain the blood of the innocents. You know, standard survival game stuff.

Food and drink mean little to a vampire, so despite the traditional trappings of its genre, breakout hit *V Rising* offers no hunger or thirst meters. Instead, it's your need for blood that checks off that particular survival staple. Every time you feed, you'll drain your prey dry while filling up your own Blood Pool, which decays gradually over time, or significantly faster while using some of your special vampiric powers. Run out of the red stuff and you'll eventually starve to (un)death.

More than just a simple stand-in for genre staples, however, blood also affects the ways you move through the world, and particularly through combat. Each blood type offers its own bonuses – drinking from any animal makes it easier to get around by boosting speed. Draining a rogue-type human offers bonus crit chance, while scholars raise your magic.

The absolute strongest specimens boost all of your unlocked bonuses by a third, but they're more valuable as your thralls. Using your powerful vampire glare to recruit servants allows you to send them out to do your dark bidding, and the better their blood, the more likely they are to succeed at their tasks. The idea of an army of vampiric drones definitely suits the setting, and having a bunch of vampiric goons wandering the castle is amusing, but it feels like there's room to expand on the idea of an army of thralls, especially around the more complex fights in more populous parts of the map.

DANCING YOUR WAY THROUGH THE CHAOS IS A GENUINE BALLET

That does, however, mean that you get to enjoy the bulk of the battle. That's excellent news, because *V Rising*'s combat is arguably the highlight of the entire game. Fights are a concoction of finely-threaded skillshots and weapon abilities woven between last-moment dashes. Boss fights can be punishing, even in co-op groups, but fights really shine when you're out wandering the world. There's a fascinatingly thin line between predator and prey, and as skirmishes spread out and pull in different groups of wandering guards or a nearby pack of wild animals, dancing your way through the chaos is a genuine ballet.

PLAYED IT

BLOODY GOOD

Its meteoric rise appears to suggest that *V Rising* has breezed past many of the perils of Early Access. Resources and combat are intelligently gated, ensuring that progression doesn't feel like a simple case of grinding for the next most-powerful set of gear. An exhaustive array of items and bosses makes for an experience that pulls you back and forth across its map rather than simply corralling you towards the next item on a checklist. Robust multiplayer offerings and a setting that seems almost tailor-made for dedicated RP servers further disperse the critical path.

Whether that's enough to keep players around through the planned year-long Early Access period is anyone's guess, not least because we've seen a lot of this before; development of *Valheim* – last year's breakout Early Access survival hit – was stopped in its tracks as an almost direct result of its insatiable and unexpected audience. In both its folkloric setting and its surprise ascent up Steam's top sellers list, *V Rising*'s story is pretty similar so far, but perhaps Stunlock's previous multiplayer stumbling blocks will be enough to get its latest effort successfully over the line.

Alistair Jones

ABOVE: Resource machines can get pretty monstrous.

LEFT: Combat skews strongly towards skillshots.

Turbo Overkill

NEED TO KNOW

DEVELOPER
Trigger Happy Interactive

PUBLISHER
Apogee Entertainment

LINK
bit.ly/3rNePcX

TURBO OVERKILL

A chainsaw for a leg, you say? Okay, I'm in.

To kill things, shoot them until they die. How strange that something so brutal should appear so utterly banal. It's an excellent tip, however, for navigating *Turbo Overkill*'s dark, cyberpunk world, and we're glad the game chose to give it to us as almost our first interaction.

Turbo Overkill's devs have seen Blade Runner. Possibly more than once. They've also played *Bayonetta*, *MadWorld*, *Syndicate* (the good one), *System Shock*, *Apex Legends*, and *Doom*. The game mashes these all together with absolute glee, the grin on the faces of the devs evident with every corner you turn.

The setting is Paradise City, where the grass is anything but green and the girls are quite likely to shoot you. The 'you' in question is Johnny Turbo, a cross between *Cyberpunk*'s V and a *Syndicate* agent, with a chainsaw for a leg. Despite this apparent disability he's able to move as if speed skating in any direction, making the edges of platforms as dangerous as the fireball-shooting bad guys.

In addition to his pair of pistols, Turbo is armed with his lumberjack leg, which he can use to slide at groups of enemies, and a dash that can cross gaps and dodge incoming fire. Naturally, you pick up shotguns and grenade launchers and dual-wielded machine-guns as the game progresses, each with alternate fire modes and the ability to be upgraded at cabinets. There's also a minigun that doubles as a flamethrower, just in case you find that sort of thing interesting.

Ammo lays around the place, as do health potions and entire suits of armour. Red barrels explode, you shouldn't walk in the green gunk, and every enemy has been thinking about shooting you from the moment of its birth. We've all played games like this before, and *Turbo Overkill* cements its retro credentials with a pixelated, gritty aesthetic that actually works well when applied to the neon cyberpunk city, with post-processing effects bringing in plenty of rain and bloom lighting. It also means framerates and resolutions can be high – the flat level geometry behind the low-res textures is the price we have to pay.

Of course, your city doesn't end up looking like Paradise does without a dark secret that needs to be rooted out, and *Turbo Overkill* leans back on the old 'rogue AI' routine. The entire population appears to have developed a bad attitude, alongside a rash of cybernetic implants, since Syn took over, its giant purple eye being possibly our favourite evil computer look since Potato GLaDOS.

PLAYED IT

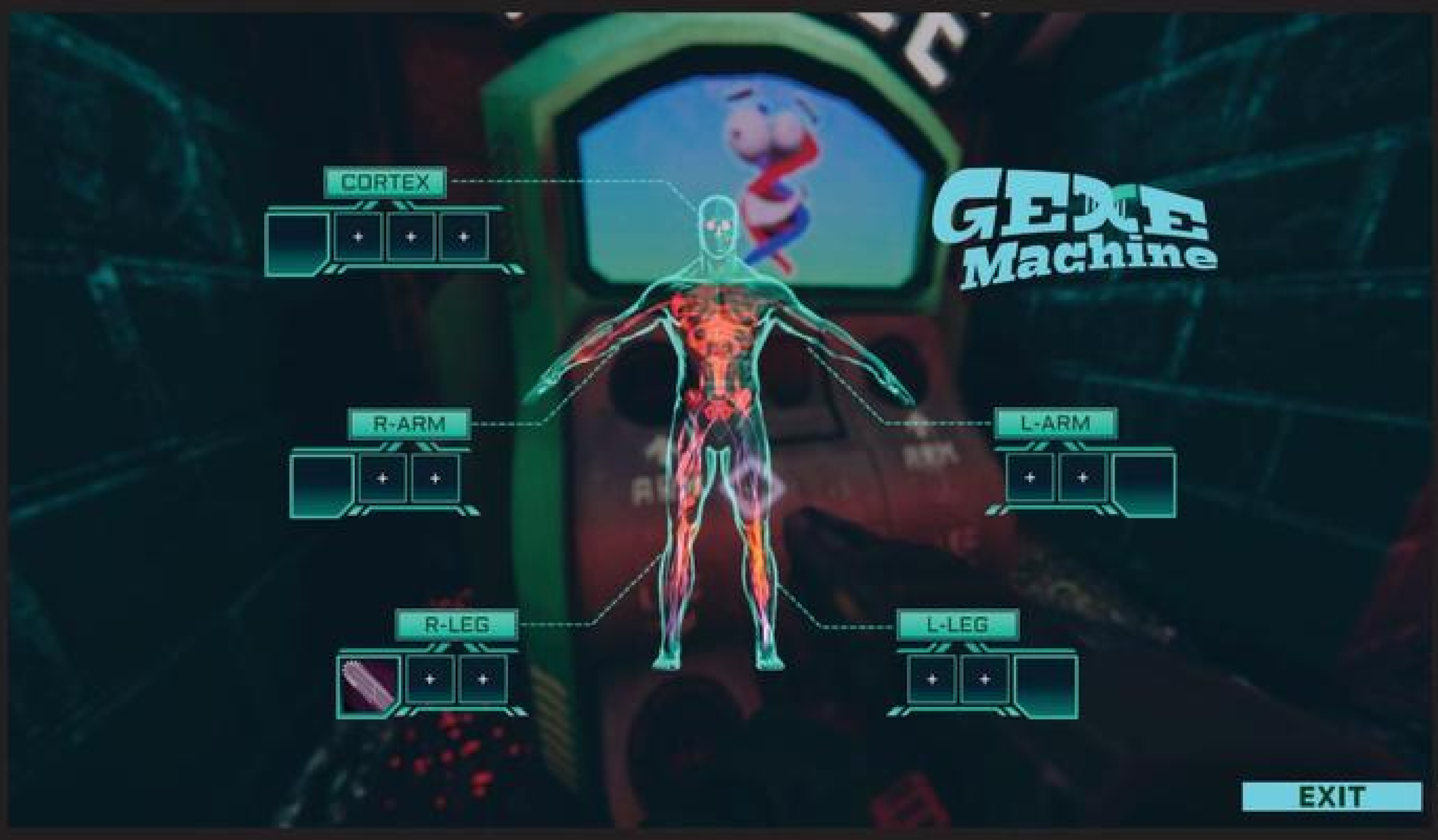
THAT OLD SAW

There's also a wicked sense of humour at play. It starts when you're asked to choose a difficulty level, which are named in true id style, and it's worth screenshotting the blue screen of death you see when you die – there's far too much there to take in with a single glance. The absurdity of the game itself, how overpowered you are right from the beginning, carries through to the No Chainsaws Club and the birds Turbo flips when his missiles detonate.

The other thing about *Turbo Overkill* is that, even as it enters Early Access, it feels remarkably complete. The dev could add ray tracing, maybe, add some weight to the gun feedback, add a bit of variety to the music, and improve the checkpoint system so you're not forced to repeat encounters. Today, you get one of a planned three episodes, and responding to audience feedback to improve a game as you add new content is precisely what Early Access is for. *Turbo Overkill* is polished and making sure the quality level stays where it is should be the target.

Ian Evenden

CEMENTS ITS RETRO CREDENTIALS WITH A PIXELATED, GRITTY AESTHETIC



ABOVE: Guns have secondary fire modes, like this pistol lock-on.

LEFT: Straight outta *Syndicate*, or possibly *BioShock*, upgrade your agent with new bionics via gene splicing.

MAXING THE

MINIMUM

Inside the often-thankless, quietly imaginative task of developing for **LOW-SPEC GAMING**

By Edwin Evans-Thirlwell

Chuhai Labs co-founder Giles Goddard thinks minimum settings are going out of fashion. A veteran of Nintendo in Japan who has worked on everything from Amiga and N64 to Wii and Oculus Quest, he's noticed a change over the years with regard to developing for different PC specifications. "It used to be that the developers would aim for the lowest spec, and they'd make it look great on that, regardless of anything," he says. "And then, if you had a faster PC or graphics board, you could put more bells and whistles on top for post-processing effects or whatever, but only to make what was already there nicer-looking.

"I think nowadays, because everybody's got a [powerful computer] the bar is so high that all the AAA makers are basically just aiming for the highest spec PCs. They're assuming that if you're going to pay that much for the game, you're also going to pay a lot for your gaming setup [so] obviously, they spend a lot of money, time, and effort making the games as great as possible on those machines. I don't think it's really in their interest any more to aim for the lower spec. It definitely used to be the priority, I think, maybe ten or twenty years ago."

HIGH LIFE, LOW SPEC

These shifting priorities are reflected, Goddard suggests, in the way games are discussed and reported on. "It used to be quite a hot topic – if you turn on these settings on this PC with these specs you can get these kind of graphics. It used to be in all the reviews and all the magazines, how to get the most out of this game. And that's just not talked about – you just assume it's going to be max settings."

"That goes with my experience of this sort of stuff," agrees Terry Goodwin, technical director at Lab42, whose projects include the PC versions of *Yakuza 0* and *Yakuza Kiwami*. Studios that specialise in porting tend to feel it most when clients neglect lower spec hardware. "Especially with developers that are very PC-focused, even if their goal is not to make the most amazing-looking game, they often don't think about the low end at all, which is a problem for us when they come along and say they want a Switch version, or whatever." On PC especially, he says, "Optimisation is not as considered as much as it probably should be."

One reason it's a fine time to pay more attention to lower spec gaming is that it's better for the environment. Playing with the settings turned down tends to consume less electricity, though newer components may be more energy-efficient in themselves, and supporting older hardware is obviously more sustainable. Developing for cheaper components also makes games more inclusive – an important extension of conversations about diverse representation or creating accessibility options for players with disabilities. But the simpler point is that tailoring and optimising a game for leaner PCs involves a lot of craft that tends to be disregarded amid the industry's endless arms race for the cutting edge. It's every bit as much a 'feat of technology' as capitalising on the latest rendering techniques.

BOTTOM: *GTFO* uses fog as a tool for both atmosphere and performance.

TAKE YOUR BENCHMARKS

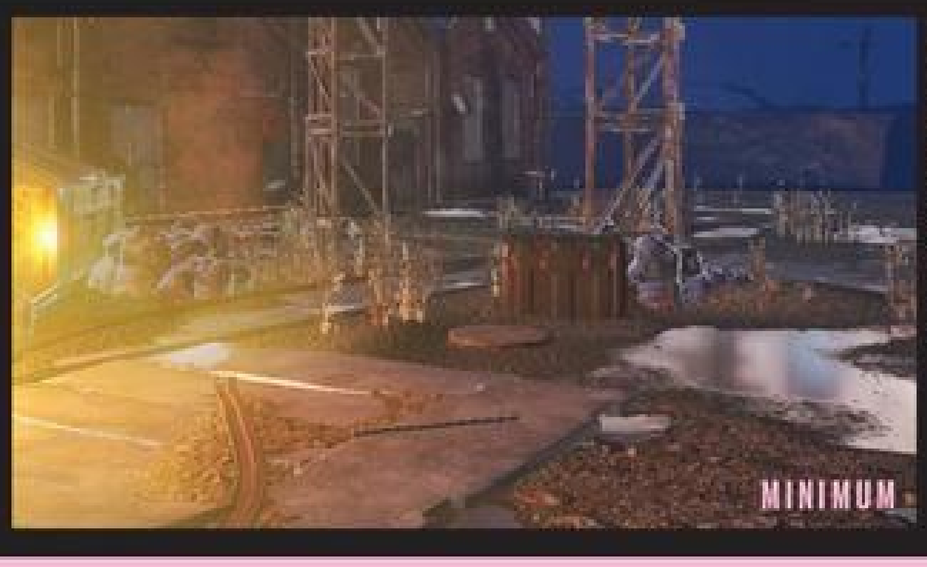
Choosing and developing for a minimum specification is a complicated battle that, ideally, begins on the very first day of production. "When you set up a production, you set up budgets, right?" says Hjalmar Vikström, co-founder and game design director at 10 Chambers, developer of horror squad shooter *GTFO*. "So the financial budgets, of course, but then you have performance budgets, memory, RAM, some kind of performance goal for certain hardware. And that's basically

"WHAT'S THE TARGET AUDIENCE, WHAT'S THE LOW SPEC AND THE RECOMMENDED SPEC?"

DEAD RECKONINGS

René Tschacher explains how the dev tailors simulations like* Dead Man's Diary *for lower-spec PCs

"We usually get the best results from the resolution, or resolution scaling. The range of shadows is also an aspect that can be easily scaled down."



"Performance, lighting and shadow rendering [are the biggest challenges for photorealistic 3D games]. Object optimisation and powerful shaders must also be considered."

where that whole thing starts. What's the target audience, what's the low spec and the recommended spec? And what you do then is you test for that all the time.

"If [any single] team is responsible for the low spec, that would be the delivery team in our company, or what you would call QA." But adhering to those target specifications is a task for everybody. "There's always a big combination of QA, programming, technical artists, and render programmers and system programmers, a whole big team effort to make the game perform. In any production I've been on, performance is a concept you always work on, because when a game is not performing, the rest of the experience is suffering."

Hence, among other things, *GTFO*'s marvellous fog, which blends and accommodates the needs of artists, narrative designers and programmers. One one level it's a homage to Alien's murky corridors; on another, a way of avoiding 'load steps' or incremental environment loading, to keep the framerate up and minimise work for artists. "So performance is a thing, and the visual inspiration comes from Alien, and we're a small team with limitations

on our art pipeline – all that comes together to create a plan. Fog is not there for performance, but [...] it fits together and we leverage that as much as we can." Some players miss the point here, Vikström adds, assuming that the fog exists simply to lessen the load on the game's engine. "The fog in *GTFO* is so much more than just a vision limiter, it's a mood setter, right? So sometimes I get the question, can you disable the fog? And I'm like, 'No, you're basically disabling half the game.'"

For a small team like 10 Chambers, testing for things that threaten the target specifications can be practically a horror game itself. "A simple chair could be low res in polygons, but then accidentally have a super high res shadow mesh, or something like that. It's a simple problem to fix, but first, somebody needs to find that. So you need to have an analytic toolset to evaluate the complexity of the meshes. Do some kind of filtering to see if, oh, there's a shadow mesh here with tens of thousands of polygons or triangles – that doesn't make sense. Or maybe the test is automated, and then maybe somebody needs to add safeguards, but it could also be that our render programmer needs to optimise the order in which things are rendered, or an assistant programmer needs to make sure that chairs are never rendered if they're behind a door."

It might sound more sensible to focus on honing an optimum look and framerate, then dialling things back for less powerful systems down the road, but this can be catastrophic, Vikström says. "It's really hard to go down in quality after years of production. You need to plan for low spec straight away, and constantly work towards it. Because after a couple of years, if you don't do that, it just becomes too big of a hurdle. And then your low spec slowly creeps up until it's meeting your high spec."

SETTING EXPECTATIONS

While he feels that developers today disregard lower spec machines, Goddard also suggests that today's players have more ways of customising their PC games today. "You have settings for everything, like turning the rain on and off. I think it's become more a question of personal preference, rather than whether your PC can handle it, and I think people expect to have the control. Because maybe they have really specced-out their PC and they know exactly what it can do. Whereas in the old days, it was basically choosing low, medium or high, and the game would decide what to turn off and on."

ABOVE: Lab42 repurposed existing features of the game's engine into graphics options for low-spec machines.

This certainly encapsulates Lab42's approach to porting *Yakuza*. "A lot of the time, designing settings isn't a matter of making those things exist, but exposing them," Goodwin comments. "[For *Yakuza*] we looked at what was in the engine, and just made a slider and graphics option for literally everything that was going on." The studio repurposed the game's level-of-detail system, for

SKY HIGH

Alexander Murphy on bringing* MoH: Above and Beyond *to the Oculus Quest platform

"Respawn had done such a fantastic job giving players an immersive experience by playing a wide range of audio tracks simultaneously. To get the performance level we wanted while staying within budget, we removed some subtler tracks after optimising the sound."

"Framerate is king in VR, so that took priority with graphics resolution close behind. We also added some features, such as the ability to toggle the multisampling anti-aliasing level. Since this is a VR project, we had to set up an entirely new build and testing pipeline."

"There is a misconception that [porting] is 'easy' since you have the base game to work from. In reality, optimisation is a difficult challenge that requires a robust set of tools, strict technical guidelines and talented artists who know how to make the game shine."

"THE FOG IN GTFO IS SO MUCH MORE THAN JUST A VISION LIMITER, IT'S A MOOD SETTER, RIGHT?"

example. "Where things that are far away render at reduced detail – it's quite trivial to use that system as a graphics feature, which is what we did for geometry. If it's lower then we force the lower [detail] ones, if it's higher than we turn on the higher ones all the time, or if there's particularly attractive visuals in a cutscene, I think we added a setting where you can use cutscene models for the main characters in the rest of the game."

Lab42 added a few computing-intensive options for beefier systems, such as supersampling anti-aliasing, which renders graphics at a higher resolution than your screen, then squashes them down to smooth out edges. But Lab42 was also keen to support older computers by, for instance, accommodating processors that don't support the latest SSEs or Streaming SIMD Extensions (essentially, instructions for how your PC thinks). "We went in and rewrote everything to work with the second set of instructions, implementing all of the stuff from the third set in the second set, so that it launched on all the machines – that was important to us, because we wanted to let everybody run it."

MINIMUM'S THE WORD

The intricacy of solutions like these reveals that optimising a game to work on older or cheaper PCs isn't just about selling to a larger audience. There's a playfulness to it, with different settings giving rise to different aesthetics within the game's overall direction. It's not just about making compromises, but experimenting with the look, sound and feel of the simulation.

To design for lower specifications can, moreover, be an exercise in time travel. "Talking about SSAA in *Yakuza*, we did enjoy that you could really crunch down the resolution, but keep the UI sharp, so it looked like a PS1 game or whatever," Goodwin says. "Stuff like that was fun to do." *GTFO*, similarly, resembles a totally different game when you drop the resolution and peel off the UI. "I really enjoy that you can do that – hide the UI, go down to 720p or below, and get this old-style *Quake* feeling," Vikström enthuses. This is, of course, especially the case for games that openly try to bridge old and new in their narrative or visual concept, such as Trigger Happy Entertainment's forthcoming *Turbo Overkill* (see p48), which blends a flashy cyberpunk setting with the chunky pixels of classic *Doom*.

The usual conflict between features and performance aside, *Turbo Overkill* is a tug of war between different eras of videogame graphics. "When I first started the project, I made a list of rules that I should follow," says lead developer and *Doom* modder Sam Prebble. "Like, you can't use any technology like shaders, or reflections, advanced lighting methods, that were invented after the year 2000. I would try to avoid putting those into the game [...] but eventually I got to a point where I just didn't like the way it looks. If I want a neon-drenched cyberpunk city where it's always raining, you have to have reflective surfaces, there's no way around it – well, there probably are ways, but everything I tried wasn't very pleasing to look at.

RIGHT: Shadows are often the first thing to go at lower specs.

"YOU DON'T EVEN HAVE TO MAKE REDUCED POLYGON VERSIONS OF THINGS ANY MORE"

"So I kind of just stumbled into slowly adding more modern rendering techniques, and I just got to a point where I said, 'OK, screw it. I'll just throw it all in, but try and ground it in a retro look, or I guess it's kind of cringy, but 'retro plus', to find a nice balance of modern and old technology.'" Prebble has spent the best part of a decade picking which assets to update. "It's like, this headset doesn't look too great. I could go back and bring it up to scratch, but I don't want to polish it too much and detract from the original look of the game."

TOP: Those lowered settings are often more noticeable in motion than in screenshots, but on the whole we were impressed with how well a lot of games hold up.

KILL SWITCH

One ironic outcome is that *Overkill* currently requires quite a 'hefty' PC. But it does accommodate players who want to excise the modern flourishes and experience something like Prebble's original, heavily rule-bound retro prototype. "I have seen a lot of people run the demo on low settings, and some people look at that and say it's a retro game, it's supposed to look chunky. I kind of agree with that. Originally *Turbo Overkill* had a pixelation filter in it, which is something I used to play with all the time, just because I liked the look of, you know, low resolution graphics."

Prebble is considering a lo-fi version for 'potato PCs', following on from the lo-fi options he made for his *Doom* mod *Total Chaos*, which "basically downgraded all the textures and stripped out a lot of shaders and all our models had half the polygons. That's something I'd love to do for *Turbo*, but it would only be later in development".

BOXED OFF

There are parallels between low-spec gaming and demaking, the practice of remaking a game to run or look as if it's running on old hardware. They're arguably the same thing – demaking redefines developing for lower specs as an art form deserving celebration. Having spent decades wrestling various technologies into submission, Goddard is both fascinated and repelled by the thought of adapting new games to platforms such as Gameboy. "To me it just sounds like hitting my head with a hammer non-stop. That doesn't seem to be anything enjoyable there from my point of view, but because [younger developers haven't] gone through all that pain they don't see it – they find it fascinating and really intriguing."

Goddard argues that for larger established teams, the question of high or low spec may become irrelevant in a few years thanks to technologies that automatically adjust for different hardware capabilities. Take Unreal Engine 5's geometry system Nanite. "Basically, you throw as many polygons as you want at it, and it just figures it all out. Up until now all the games I've ever made [have been] a constant battle for framerate. You're always trying to reduce polygons. With UE5 now you don't even think about it. You don't even have to make reduced polygon versions of things any more. Everything's automatic."

Features like these could transform the industry, he says, much like the spread of intuitive middleware tools such as Unity. "It's getting to the point where it's no longer a programmer job worrying about framerate. It's basically artists buying assets from a store and throwing them in without even worrying about texturing or LOD or anything like that. Three million polygons, ten million polygons, whatever, just throw it in and it just works on any hardware. So that's the kind of end goal of all this fighting over settings – it's all just handled within this black box here."

This certainly sounds like it would remove much of the stress from projects like *GTFO* and *Turbo Overkill*. But from a player perspective, it's energising and inspiring to be given more direct control over how a game looks and runs. And as Vikström concludes, planning out a game so as to accommodate lower specs is a source of creative satisfaction. "You have expert programmers, expert artists, expert sound designers and storytellers, and they're all working together as tightly as they can. That's one of my favourite things about game development – these really varied talents that need to work together. And also, the big challenge." ■

LEFT: *Wonderlands* has a huge spectrum of graphics settings. At the lowest, most background NPCs are removed to improve performance.

AAA TO B

Three developers offer thoughts on trends in blockbuster game visuals

GILES GODDARD, CO-FOUNDER, CHUHAI LABS

"It's interesting to see what will happen with 8k and ray-traced graphics, because I think we've hit the limit for resolution with 8k. [With real-time ray tracing] it's going to be less about turning settings off and on [because] it renders the world as in real life. It's very hard to turn things on and off with ray tracing."

TERRY GOODWIN, TECHNICAL DIRECTOR, LAB42 GAMES

"People are always saying, how can they possibly get better than this? I think there will always be new ways of representing some facet of reality that you didn't realise was missing until it's put in a game. And everything looked really great before then, you just didn't really notice."

ALEXANDER MURPHY, PRODUCER, VIRTUOS PARIS

"I think the focus will be on small details. Is your fox made of four polygons with one animation, or will it be a fully scanned animal with multiple animations? I think we'll see more games using unique art styles to stand out. Games like *BioShock* and *Dishonored* have 'realistic' art styles but with their own twists."

HOW WE REVIEW

We review each game on its own merits, and try to match it to a reviewer who's a passionate expert in the field. The main aim of reviews is to help you make buying decisions. To this end, we're selective about what we review, and try to focus on the notable, interesting, exciting or surprising.

DOWNLOADABLE CONTENT

DLC might be new missions for a game, or it might be a single new item. If we think you want to know about it, we'll review it.

EARLY ACCESS

Any released alpha, beta, or otherwise unfinished game that you can currently pay for. For these games, we won't assign a score, but we will tell you whether they're worth your time.

THEY'RE BACK

Whenever there's a bargain or re-release of a significant game, our expert will revisit it and tell you whether it holds up today. With jokes.

OUR SCORING SYSTEM EXPLAINED

00%-09% Broken or offensively bad; absolutely no value.
Example *Leisure Suit Larry: Magna Cum Laude*

10%-19% We might be able to find one nice thing to say about it, but still not worth anyone's time or money.
Example *Gettysburg: Armored Warfare*

20%-29% Completely falls short of its goals. Very few redeeming qualities.
Examples *Family Guy: Back to the Multiverse*

30%-39% An entirely clumsy or derivative effort. There's little reason to play this game over a similar, better one.
Examples *Trials of the Blood Dragon*

40%-49% Flawed and disappointing.
Examples *Aliens: Colonial Marines*

50%-59% Mediocre. Other games probably do it better, or its unique qualities aren't executed well.
Examples *Primordia, Homefront: The Revolution*

60%-69% There's something to like here, but it can only be recommended with major caveats.
Examples *No Man's Sky, Ghost Recon: Wildlands*

70%-79% A good game that's worth playing. We like it.
Examples *Prey, NieR: Automata*

80%-89% A great game with exceptional moments or features, and touches of brilliance. We love it.
Examples *Overwatch, Night in the Woods*

90%-94% A compelling recommendation for most PC gamers. Important to PC gaming, and likely ahead of its time.
Examples *Bayonetta, Dishonored 2*

95%-96% Far and away one of the best games we've ever played. We recommend it to the entire world.
Examples *Half-Life 2, Kerbal Space Program*

97%-100% Advances the human species. Boosts the immune systems of nearby children and small animals.

PowerPlay EDITOR'S CHOICE

The Editor's Choice award is granted in addition to the score, at the discretion of the PC PowerPlay staff. It represents exceptional quality or innovation.

Small claims

As games journalists, we naturally spend a lot of time talking about the big things when it comes to games – the core concept, the overall art style, the thrust of the story. But part of me thinks that the things that really make a game sing are the little details, small choices that add up to that intangible 'gamefeel'. Take the cumbersomely named *WH40,000: Chaos Gate – Daemonhunters*. The big picture is immediately appealing – it's Warhammer *XCOM*, and it executes that really well. But the things that will make it stick in my memory are small touches, like the way the Space Marines move, appropriately agile despite their heavy armour, or the wonderfully neurotic dialogue of your on-board Tech Priest, or the fearful, frenzied barks of cultists as they see you coming. Sometimes not seeing the forest for the trees just means you're looking at some really lovely trees.

Robin

THE THINGS THAT REALLY MAKE A GAME SING ARE THE LITTLE DETAILS, SMALL CHOICES THAT ADD UP TO THAT INTANGIBLE 'GAMEFEEL'

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This month's corrupted, mutated reviewers...

ROBERT ZAK
Specialist in
Purging the unclean
Currently playing
WH40K: Chaos Gate – Daemonhunters
This month
Had fun trying to contain an even worse pandemic.

NAT CLAYTON
Specialist in
Smash and grabs
Currently playing
Teardown
This month
Took out her frustrations on a bunch of virtual buildings.

CHRIS LIVINGSTON
Specialist in
Defying narration
Currently playing
The Stanley Parable: Ultra Deluxe
This month
Made very good friends with a bucket.

PHIL IWANIUK
Specialist in
Wheely bad puns
Currently playing
Moto GP 2022
This month
Took a two-wheeled trip back to 2009. That's 13 years ago, and that's terrible.

RICK LANE
Specialist in
SpaaaAAAAaaace!
Currently playing
Galactic Civilizations IV
This month
Opened his mind to the void, and wished there was a tutorial.

TOM SYKES
Specialist in
Rockin' out
Currently playing
Pebble
This month
Investigated the platforming potential of a literal pebble. As you do.

MATT ELLIOTT
Specialist in
Earplugs
Currently playing
Alien: Isolation
This month
Revealed his greatest fear: well-crafted videogame sound design.

CONTROLLED CHAOS

Dealing with cosmic plagues in WARHAMMER 40,000: CHAOS GATE – DAEMONHUNTERS

By Robert Zak

Grand Master Kai looms over my crew via hologram like a Greek cybergod. It's our bimonthly report and he's not happy. Our Inquisitor's desire to procure knowledge about the Nurgle plague has accelerated its spread, and he wants to know who's responsible. Do I cover up for Inquisitor Vakir and piss off Brother Ectar, or do I throw Vakir under the bus? Whatever I do, someone will be unhappy, and that will have knock-on effects.

I go for the third option: tell the Grand Master that the mission is going exactly as planned. He buys it, and seeing as we're doing *so* well in our campaign (which we're really not) he diverts our requisitions and armoury access to some other chapter that needs them more. My reluctance to attribute blame has meant I've stayed onside with my crewmates, but have also ensured that the next two months of our campaign are going to be particularly gruelling.

And here I was thinking that *Daemonhunters* would be a straightforward turn-based tactics game, content to tweak those sturdy *XCOM* foundations for the marketable mythos of Warhammer 40,000. Yes, you'll spend most of your time on the battlefield, hopping between planets in four-man squads to combat a cosmic pox propagated by the Plague God Nurgle, but while *Daemonhunters* executes its combat very well, it also succeeds at all the stuff between the missions.

The greatest threat is the Bloom, the Nurgle-driven disease

There is schmoozing, politicking and appeasement, space battles, and text-based events, research and ship repair. You pick the pace at which you progress through the campaign, you balance the conflicting interests of your frustrated, fractious crew. You're an active character in a compelling, well-written space opera, and your decisions as commander of the good ship Baleful Edict are just as important as your feats in battle.

Each crewmate on the upper decks of the ship has their own priorities within the larger conflict. Brother Ectar is a resolute Grey Knight veteran who's fiercely loyal to his fellow marines, while Vakir is an arrogant but dedicated (but mostly arrogant) Inquisitor who believes that marines are expendable in the mission to understand and stop the Bloom. Then there's Lucete, the charmingly robotic Tech-Priest who'll often interrupt the other two's squabbling while preaching the importance of non-emotion.

There'll be times, for instance, when Ectar will insist on observing Grey Knight traditions, such as organised fights between Marines or even dedicated days of meditation. Going through with these rituals will boost morale and grant XP buffs for your Marines, but frustrate the single-minded Inquisitor, with whom you'll suffer a penalty to research speed. You couldn't have picked a less compatible group of people, but even though they're all rather aloof and often too embroiled in their personal missions to see the bigger picture, they're well characterised through solid writing, plentiful dialogue options, and surprisingly expressive cutscenes and animation. Hanging over these onboard politics are regular reports to the Grand Master, with whom you'll need to tread carefully if you want to be able to upgrade your recruits and equipment.

BLOOM TOWN

But the greatest threat is the Bloom, the Nurgle-driven disease which breaks out on random star systems as you travel between them. Should you fail to reach an outbreak on time and quell it with your squad, that planet will gain a point of Corruption, which will make future missions there harder and increase the likelihood of Bloom spreading to other systems.

It's pretty much the core system of the board game Pandemic – which any fan will attest is masterful at generating tension. With that as a foundation, and the fact that your ship is seriously under-equipped at the start of the game, it makes every

NEED TO KNOW

WHAT IS IT?
A turn-based tactics game about combating a cosmic plague.

DEVELOPER
Complex Games

PUBLISHER
Frontier Foundry

REVIEWED ON
Ryzen 7 5800H, Nvidia GeForce 3070 (mobile), 16GB RAM

MULTIPLAYER
No

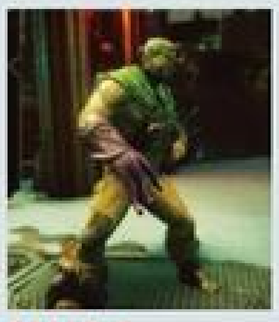
LINK
chaosgate.com

EVIL EVOLUTION

Warp Surges trigger progressive mutations in the enemy

STAGE 0
An entirely unmutated cultist of Nurgle, rather wishing he didn't have to fight Grey Knights.

STAGE 1
This Plague Marine has grown a big horn. May not seem like much, but it's the first step on the path to greatness.



STAGE 2
A betentacled hand and a tumor-ridden foot – what greater blessing could a cultist ask for from the Lord of Disease?

STAGE 3
Horns and a mouth in his gut helps this Plaguebearer stand out from the crowd – and eat two lunches at once.

STAGE 4
With a grimacing face on his shoulder and an even bigger stomach-maw, this guy's got a lot of mouths to feed.

The vivid art style really makes the models pop, and this Plague Bearer's very happy about it.

FAR LEFT: As you travel between star systems fighting the Bloom, you'll encounter random events and even fight enemy ships.

LEFT: The destructible scenery makes for some great moments of chaos (and tactical headaches).

When you're up close and personal, it's time to get surgical.

The crew of the Baleful Edict are a squabbling bunch, and will often look to you for mediation.

FAR RIGHT: Enemy AI isn't perfect, and has a tendency to go into Overwatch overload.

BELOW: You'll face some big decisions in your campaign, all with tangible knock-on effects.

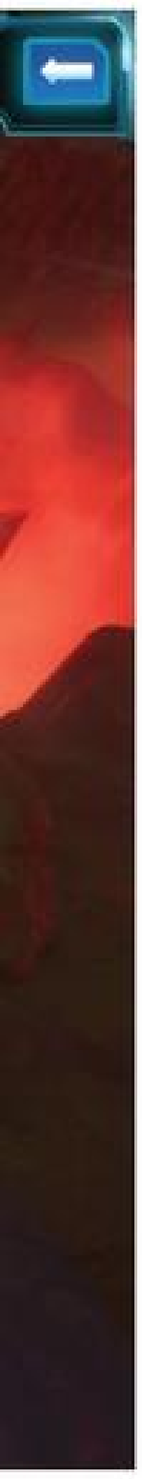
passing in-game day, every trip across the galaxy, and every decision to side with one crewmate or another, a tough one that'll have consequences.

Both tension and Bloom trickle down onto the battlefield like a loathsome fungal rot soaks through soil to attack the roots of a tree. Once you deploy your squad of Grey Knights on a Blooming planet, you get down to the turn-based battle part of the game. The more blips of Bloom, the harder the mission objectives will be, the more mutations enemies start with, and the more gifts that Nurgle can bestow to his followers.

Bloom-infested planets will look different too, and I spent a good bit of time sweeping over battlefields to admire the eye-filled flora, tentacles, and other pustulant masses that crop up. To top it all off, a Warp Surge meter ticks up every turn, giving enemies visible mutations like horns and classic Nurgle gut-mouths, granting them various status boosts. The Bloom's effects on both enemies and environments are deliciously vile.

It all sounds a bit overwhelming, and indeed when enemies break out in boon-granting diseases, defeated cultists and Plague Marines rise from the dead, or zombie Poxwalkers burst from the ground, it can feel that way for a bit. The early going is tough, especially as your squad picks up injuries that usually won't have healed by the next time you head to the next battle. But once you get to grips with the depth of tactical possibilities at your disposal, things really starts to click.

The environments, for a start, are a delight of destructible potential. Beyond the obligatory explosive ammo caches and fire pits, there are pillars to topple onto enemies and bridges to destroy. Particularly impressive is the fact that most walls can be blown up, which adds a layer of volatility to even the best-planned moves. At one point, I pushed a column onto a line of four enemies, one of whom was sent flying into an ammo crate. As the smoke cloud dissipated, I saw that I'd also blasted away a portion of wall, causing an enemy patrol to come streaming in.



KNIGHT SCHOOL

Combat has some classic *XCOM* foundations, from darting between partial/full cover to action points and core abilities like Overwatch, but beyond that it very much carves its own path. There's almost no RNG, for a start, and what's the point of relying on cover when that cover may well be blown away in the next turn? Similarly, the rich interplay of the Grey Knights' classes and abilities meant that before long I'd all but forgotten that Overwatch existed.

Using Teleport Strike, I could damage several enemies in a single AP

Take my Interceptor, Voldred Storm, who I trained into a dual-wielding ninja with self-replenishing action points. Using Teleport Strike, I could damage several enemies in a single AP, give that AP an 80% chance of automatically replenishing, then continue to tear up enemies deep behind their lines. Lacking Terminator armour, Voldred is a glass cannon, but I addressed that with my Justicar, who could bolster his own armour, then psychically send all of it to Voldred for one turn, making him ready to receive his inevitable battering in the next turn.

You can set enemies burning and bleeding, and use grenades or psychic abilities to send them into frenzies where they attack their own team. Stack that with an abundance of upgradeable wargear and there's lots of room for build experimentation.

But there's always a trade-off in *Daemonhunters*. Fancier psychic abilities use Willpower, which upon use tick up the Warp Surge meter, inching it towards mutations and other gifts for the enemy. To counter these, you can research Stratagem cards, which let you do one-off things like teleporting your whole squad to one location or getting an enemy to fight on your side for three turns.

There are so many nice touches that flesh out *Daemonhunters*: *Fallout*-style targeting of specific body parts,, text-based spaceship battles, and 'Prognosticars' that you place on the star map to inhibit Bloom growth and get bonuses in various star systems. All these little threads are woven into the story and play experience, feeling neither excessive nor superfluous.

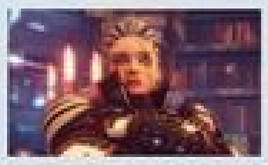
GREY AREA

Daemonhunters is not without a few frustrations. Enemy AI isn't too bright, often resorting to Overwatch in seemingly random directions instead of, say, shooting explosive nodes when you take cover behind them. There could be a bit more clarity in certain mission objectives too. Crucially, it was pretty poorly optimised on my setup, with sluggish framerates that don't respond even to drastic decreases in graphics settings, as well as some slowdowns between missions that can only be fixed by restarting the game.

With all that said, I imagine fledgling developer Complex Games will patch these issues up sooner rather than later. It would be foolishness bordering on heresy if it didn't, because it's created a bit of a gem here – one that smashes through its safe pre-release image as 'Warhammer 40K meets *XCOM*' to plant the seeds for its own series. Likewise, it breaks away from the austere stylings of 40K with a vivid, meaty art style that makes corrupted levels and enemy units ooze with character (as well as plenty of pus and bile). Where *Daemonhunters* could so easily have been 'yet another 40K game' or 'yet another *XCOM*-like,' it emerges as one of the best offerings on both fronts. ■

ALL ABOARD!

Things to do on your ship



STIR UP GOSSIP
Chatting to your crew is a great way to learn about the lore – and they also love bitching about each other.

HIT THE BOOKS
Use Seeds gained in battle to fund your research, gaining Strategems, Prognositicars, and other 40K words.

MAKEOVERS
Give your soldiers some individuality by customising their appearances. You can't go wrong with another bionic eye.

TUNE UPS
Repair your damaged ship to make it faster, deadlier, and home to even more Grey Knights.

CARTOGRAPHY
Use the map to track the Bloom's spread across the system, and spread your psychic network to more planets.

GET TOLD OFF
You may be the Commander, but you answer to Vardan Kai, who likes to call up and give you a bollocking.

PC PowerPlay VERDICT

Chaos Gate – Daemonhunters is an engaging space opera that triumphs both on and off the battlefield.

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SMASHING STUFF

Tearing down **TEARDOWN**'s voxelated worlds never gets old

By Nat Clayton

It would be so, so easy to write off *Teardown* as just a tech demo. A simple framework of maps, tools, and missions built to show off developer Dennis Gustaffson's incredible voxel destruction technology. But over its 18-month stretch in Early Access, *Teardown* has proven itself not only a stunning display of technical prowess, but also a bloody good little heist-'em-up, and the most creative sandbox platform since *Garry's Mod*.

Teardown is, first and foremost, all about that destruction. It's a game of wooden shacks, concrete walls, metal catwalks, and plaster corridors – all of which respond appropriately to being wailed on with a sledgehammer. Despite its blocky appearance, *Teardown*'s worlds break in wonderfully convincing ways. Metal pipes bend when supports are removed, while plaster walls chip away to expose sturdier brickwork, kicking up dust as they crumble.

Teardown's genius, however, is in how it brings method to this madness. The game's campaign tasks you with a series of destructive heists to pull off with a limited set of tools. You have unlimited hammer swings, sure, but that won't get you through brick walls – and while you'll slowly unlock an array of blowtorches, shotguns, bombs, and rocket launchers, their uses are limited.

Early missions see you using these tools to carve a route through an empty map, speedrunning that course to collect valuables before the alarm timer hits zero. It's a very simple kind of mission, but wonderfully satisfying in how it forces you to consider your carnage.

Modders have tinkered with the way things fundamentally break

Teardown first launched with half of its campaign, and those early missions can feel a little bit samey. But as it made its way through Early Access, Gustaffson got more creative with the game's mission design, leading to a game that backloads its more interesting challenges to Act 2. Suddenly you're dealing with car chases, tornados, and killer robots, and the spectacle of the destruction engine really comes into full force.

NEED TO KNOW

WHAT IS IT?
A detailed voxel destruction engine framed by heist puzzles and sandbox carnage

DEVELOPER
Tuxedo Labs

PUBLISHER
In-house

REVIEWED ON
Nvidia RTX 2070, 16GB RAM, AMD Ryzen 5 3600

MULTIPLAYER
No

LINK
teardowngame.com

WRECKING CREW

As a campaign, *Teardown* is a fun experiment with plenty to prod at, framed by a light-hearted story about a contractor who keeps getting hired by the same feuding businessmen who, honestly, all kinda deserve to have their toys smashed. Chasing side-gigs and optional objectives gives you more cash to upgrade and unlock new tools, and more excuses to revisit demolition jobs you might have left unfinished.

That said, the real, enduring lifeblood of *Teardown* can be found in its modding community, which has exploded since the game's Early Access debut. Tired of its nine maps? There are dozens, if not hundreds more on the Steam Workshop. A sledgehammer is fun, but why not go to town on these new wrecking spots with laser rifles, miniguns akimbo, or portable black holes?

Modders have even tinkered with the way things fundamentally break. *Teardown*'s destruction doesn't

ABOVE: Next stop, third floor.

TOP: The mall's having a fire sale.

ABOVE: Hard to port!

account for structural stability or tension, meaning entire buildings will often be held up by one voxel. Various modders have attempted different ways to remedy that, breaking objects in flight or chaining destruction to create more believable building collapses.

The only real shame is in *Teardown*'s complete lack of multiplayer. While I can appreciate the programming nightmare that must come with trying to sync thousands of exploding voxels across multiple clients, it's all too easy to imagine the kinds of new, impromptu games that could spawn from *Teardown*'s foundations.

Because those foundations really are incredible. *Teardown* isn't just a tech demo – it's a window into a world where game worlds only became more dynamic, more physical, more breakable. *Teardown* is a game that's excited about its own technology, and wants to show you all the ways it can break stuff.

It's a brilliant series of puzzles, a never-ending series of new worlds to break and new tools to break them with. But most of all, *Teardown* really is just a smashing great time. ■

PC PowerPlay VERDICT

Teardown is an endlessly delightful destruction sandbox that modders and I can't seem to get enough of.

90

Gmod-style physguns let you lift entire buildings.

TOOLS OF THE TRADE

No demolitions expert should leave home without these

SLEDGEHAMMER
No ammo. No fuss. Just a slab of rock on the end of a stick. If you need something smashed, this'll smash it no problem (as long as it's not brick or concrete).

SHOTGUN
Think of it as a sledgehammer, but with range. Not the most precise tool, but if you need to smash a window in a hurry there's no better one.

ROCKET LAUNCHER
The rocket launcher is for those special occasions where you need to blow something up from half a mile away. Kaboom!

BXH-X42
Fine, this one's a mod. But sometimes you just truly need something erased from existence – and this handy, portable black hole launcher will do exactly that.

RELIABLE NARRATOR

Buckets of new features come to THE STANLEY PARABLE: ULTRA DELUXE

By Christopher Livingston

I've never given much thought to the 'skip dialogue' button in a videogame, but after playing *The Stanley Parable: Ultra Deluxe* I can't stop thinking about it. The button is just one of several new features explored in the "expanded reimagining" of 2013's *The Stanley Parable*, which once again turns the act of playing a game into a hilarious, surprising and thoughtful examination of games and game development, players and player choice, and yes, even simple buttons.

But what even is *Ultra Deluxe*? It's not just a remaster, though the original game has been faithfully rebuilt in Unity. You can play through it once again as office worker Stanley, who realises he's the only one in the building and sets out to discover why while a gentle storybook-style narration guides him through the empty corridors and rooms. Once again, the simple act of disobeying the narrator and making your own choices leads to numerous branching paths, a range of reactions from the narrator, multiple endings and the pure joy of doing something unexpected and discovering the game fully expected you to do it.

But at some point while replaying the new version of the old *The Stanley Parable*, the new content begins to intrude. It's not a subtle introduction – a door labelled New Content appears in the familiar office corridor you've walked down a dozen times already. Step through it and a bunch of new features are trotted out to you. Like a bucket that Stanley can pick up and carry around with him.

BUCKETS OF FUN

That's it. It's just a bucket, a little joke based on the idea that some players found the original game confusing, and so this Reassurance Bucket can now be carried around as a companion to stave off any feelings of discomfort or uncertainty. But of course, a simple joke in *Ultra Deluxe* never remains simple. When you're carrying the bucket the narration changes to reflect that, and once the narrator began saying different things I started to wonder what else might be different while I was holding the bucket. What if I climbed out a window with the bucket, or took it into the closet, or took it to one of the game's many endings? What if I started over with the bucket and then brought the bucket back to the place where I originally was given the bucket? Could I get two buckets?

I did, eventually, get my Reassurance Bucket back

As always, developer Crows Crows Crows has done a brilliant job anticipating anything and everything a player might think to do while playing *The Stanley Parable*, including holding a bucket and plenty more, and the rewards for experimenting are more humour, confusion, and thoughtful explorations about game design and player choice.

And as silly as it sounds, at one point I decided I'd try to get rid of the bucket, a lengthy task that rewarded me with a Replacement Bucket, which I stubbornly also got rid of, after which I wound up with no bucket. And I'm embarrassed to say I genuinely felt a bit of panic. It couldn't be that I had become legitimately, emotionally attached to the bucket, could it? No, it was just that carrying the bucket had unlocked a number of new endings (and bucket-based revisions of the game's original endings) so I worried that without the bucket, I might wind up missing something. Some ending, some bit of narration, some silly or funny or thought-provoking moment that are the real collectibles of *The Stanley Parable* experience. I did, eventually, get my Reassurance Bucket back, and dammit, as stupid as it feels to say this, I felt reassured to once more be clutching it.

There's far more than just a bucket in *Ultra Deluxe*, by the way – I've played it for ten hours and I'm fairly sure I still haven't uncovered all its new tricks and treats. As with the original, there are a few patience-testing moments where the narration carries on just a bit too long and I found myself restless to keep poking around rather than standing in place listening. But mostly it's a delight, an adventure full of fun surprises, meta-humour, and commentary on games and how we play them. Certainly nothing a 'skip dialogue' button would improve. ■

NEED TO KNOW

WHAT IS IT?
The Stanley Parable rebuilt in the Unity Engine, but with more of itself

DEVELOPER
Crows Crows Crows

PUBLISHER
In-house

REVIEWED ON
RTX 2080, Intel i7-9700K , 16GB RAM

MULTIPLAYER
No

LINK
stanleyparable.com

MOD SQUAD

Other mods that became standalone games

DAYZ
The game that inspired countless survival games began life as a mod for *ArmA 2*.

COUNTER-STRIKE
The game had humble beginnings as a mod for the original *Half-Life*, and quickly grew into a sensation.

CHIVALRY
The medieval multiplayer hack-and-slash game began as *Age of Chivalry*, a *Half-Life 2* mod.

DOTA 2
Valve's free-to-play MOBA's roots lie in a 2003 mod for Blizzard's *Warcraft III: Reign of Chaos*.

PC PowerPlay VERDICT

A delightful update that fills the original game with more humorous and thoughtful rabbit holes to get lost in.

88

FAR LEFT: What does time mean, anyway?

LEFT: No expense was spared.

You can still play the original with the same old Stanley.

AVALON CALLING

Is **KING ARTHUR: KNIGHT'S TALE** the Holy Grail or a wholly fail?

By Matt Killeen

There's no canon version of the Arthurian legend, and as such it's fertile ground for reinterpretation. From Thomas Malory's Le Morte d'Arthur to T H White's The Once and Future King, or from Frank Miller's Cursed to John Boorman's gorgeous but somewhat flawed Excalibur, everyone has their own notion of what it is and what it represents. In my case, it was a lifelong thing for Cherie Lunghi.

King Arthur: Knight's Tale sidesteps much of this by picking up where NeocoreGame's 2009 dark fantasy *King Arthur – The Role-playing Wargame* left off, and where most retellings stop. Arthur and Mordred have killed each other at the Battle of Camlann, and the Lady of the Lake has taken Arthur's body to Avalon.

The Lady awakens the deceased Mordred on the legendary island, which is a kind of purgatorial upside-down of the real Britannia, to save the world. Your mission: to reconstruct Camelot, reassemble the Round Table, and go after Arthur, who has become an undead monster.

The game is a party-based RPG with turn-based tactical combat along the lines of *XCOM*, *Darkest Dungeon* and *Divinity*, taking mechanics from each. This makes it very familiar territory. It can also be a roguelite, depending on your chosen difficulty level, with save-free permadeath available for the masochists out there.

The mission structure is simple. Assemble your team from the available knights and follow the prompts as you explore each environment. You return with loot, XP, and often a new knight for your Round Table. When a fight occurs, you spend your action points to move, fight, and cast spells until the enemy is vanquished. That might feel a little basic, but the balance of armour, hit points and vitality – health that does not regenerate during the mission – demands a touch of subtlety, rather than just charging in to hack and slash. Each party of knights needs to be balanced and play to its strengths, with each class – the axe-wielding Champion, the tank-like Defender, the sneaky Vanguard, the supporting Sage, plus ranged weapon heroes, the Marksman and the Arcanist – fulfilling easily identifiable roles. They work as a team and will end up covering for the wounded members.

Each party of knights needs to be balanced and play to its strengths

FOR THE GUIN

That combat is satisfying, with a nice juicy feel and satisfying set of noises, all without undue gibbing and blood, and is challenging enough without being pointlessly frustrating. You can move the camera freely, allowing you to see the battleground from all angles, and the campfires and shrines to restore HP or armour are on the right side of generous.

I'm not as experienced as some in this genre, but I figured most things out, even without the few cursory in-game pointers that dried up almost immediately. I did eventually discover the tutorials in the menus, but not before I'd gone online looking for advice on the complex mechanics. I couldn't get the hang of Overwatch at first, but there were always other ways to rout the enemy, as long as you remember to face them. The Backstab modifier is a killer.

The game started awkwardly, then rapidly improved once the formal mission structure established itself, especially once I stopped paying attention to the story. When I did, a well-structured and finely balanced combat game appeared. The challenge ramped up smoothly, with plenty of tension and clever problem-solving, without ever feeling unfair.

But eventually the maps grew tiresomely samey – the same woods, the same dungeons and the same ruins. You spend too long wandering round confusing landscapes, with your team running behind you like a grimdark Benny Hill show. This might be forgivable if they were procedurally generated, but someone created all this and presumably watched a playtester struggle. Turning the camera is all very well, but without a compass it's easy to get lost. Likewise, it's too easy to wander back into a fight you've seen and are avoiding while looking for a campfire. That's not a challenge, it's a pain.

That dichotomy is everywhere. The atmosphere is gloomy and melancholic, or, being uncharitable, it's relentlessly grey and dull. The fancy mist effects obscure paths and combat squares in a way that's not

NEED TO KNOW

WHAT IS IT?
Turn-based dark fantasy RPG with roguelite elements

DEVELOPER
NeocoreGames

PUBLISHER
In-house

REVIEWED ON
GTX 980 Ti, Intel i5-4690K, 32GB RAM

MULTIPLAYER
No

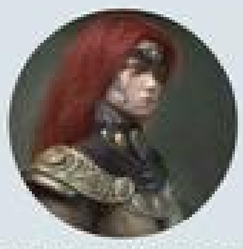
LINK
neocoregames.com/en/games/king-arthur-knights-tale

CRONE, MOTHER OR MAIDEN? *The women of Avalon and their tropes*

LADY DINDRAINE
Sensible hair. Christian Union type.

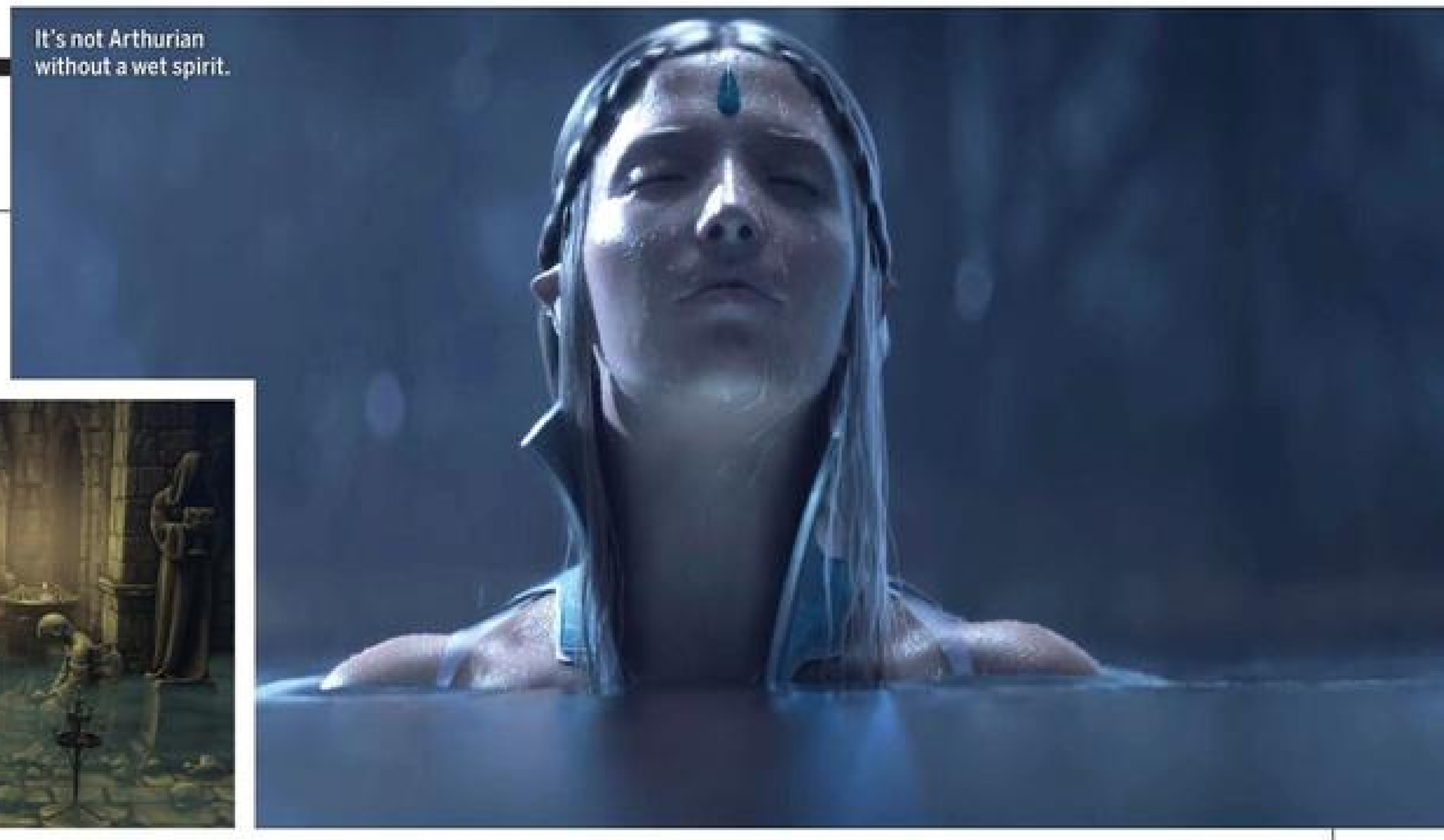
LADY GUINEVERE
Surprisingly, not to blame this time.

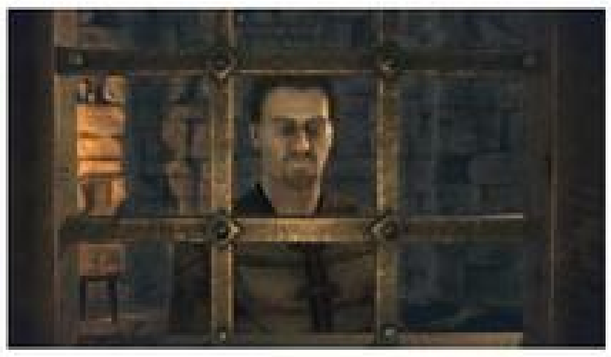
LADY MORGAWSE
Bad mum. Helen Mirren energy.



LADY BOUDICEA
Wild redhead. Revenge backstory.

LADY OF THE LAKE
Dressed in lingerie. Not to be trusted.





FAR LEFT: Who's the best king? Only one way to find out...

BELOW: It's dark, you see.

ABOVE: Mordred does wicked side-eye.

BELOW: Keeping everyone onside is surprisingly easy.

Be a dick, or don't be a dick.
Sir Kay
The battle is over and you must make a choice. This is merely the first in the chain of decisions that will determine what kind of a leader you will be. Tell me, what will happen to Camelot?

much fun, but it does look nice. Also, like every turn-based combat game I've ever played, it needs an undo command, as it's too easy to move the wrong character to the wrong place and squander your action points. Likewise, forgetting to bring potions before you set out is usually fatal and losing your progress to get back to the merchant is just annoying.

Camelot itself is better organised. Levelling up and distributing loot is a breeze. For those who obsess about modifiers, there's numbers aplenty, but the amulets, trinkets, armour, and weapons follow the traditional 'white, green, blue, purple, orange' system which made it easy to sort and assign. You spend your gold rebuilding the castle and sending your wounded or exhausted knights to the hospice or cathedral for treatment. I think I was supposed to worry about knightly loyalty and distributing rewards and titles, to keep everyone on side, but that seemed to take care of itself. Nobody left before I filled the Round Table anyway, and even death is not the end. There's a chance at resurrection from the crypt if you find the right scrolls.

As I write this review to a deadline, I'm itching to get back to it

A LANCELOT OF DATA

King Arthur: Knight's Tale was a successful Kickstarter and spent a year in Early Access, so it's disappointing that version 1.0 is poorly optimised. The huge 121GB download rivals *CoD* and *Hitman* for size, and for those using small SSDs it requires drive management that isn't really justified. At launch it was also more than a little laggy and liable to crash, which is a particularly significant issue for those playing save-less at the highest difficulty. I had problems with my monitor setup and had to play in a window at 1080p, with my mouse leaking off the edge of the screen and messing things up. Things have definitely improved as I've worked my way through it, and the developer is responding to bug reports, so there's cause for optimism.

However, my biggest issue with the game is its reductive interpretation of dark fantasy and grimdark. The whole thing is utterly and unrelentingly miserable, with no pinprick of light, or the sliver of hope that makes the endeavour feel a bit more worthwhile.

It lacks the subtle wit and edge of Warhammer, or the contrasting emotional shades of, say, Game of Thrones. The story is uninspired, the dialogue infantile or over-written nonsense. The voice acting is pedestrian at best, and amateur, grizzled, cardboard at its worst. A lot of the accents are all over the place, and the game's efforts at levity fall flat. Meanwhile, the characters are one-dimensional vessels, or simply objectionable. It's not possible to identify or sympathise with them, except in the narrowest sense of a consequence-free power-fantasy. I don't benefit from reflected glory, the way I can in the *Souls* games, for example. Here, I just don't care about anyone.

GLASS ARTH' FULL

Mordred's progress on his quest is obvious and engaging. It's not clear what he is really achieving, or even whether he should be doing it. Everyone is already dead for a start. How much worse can it be? As for those big moral decisions, you might as well toss a coin. I didn't trust anyone, so my choices were mostly utilitarian. Who do I need? How do I avoid this fight? I'm usually Lawful Good, but my 'Rightful' decisions and dialogue choices didn't really change anything meaningful.

Yet... the gameplay loop proves surprisingly effective, even as it became increasingly repetitive. By ignoring the story, the landscape, the irritating niggles and the less developed side mechanics which took care of themselves, I started to enjoy it. Then it went beyond satisfying and became needful. In short order, I became enraptured by it. I demanded satiation. To eliminate a screenful of baddies – some of whom return to life or heal themselves or otherwise cheat – was meat and drink that I found myself craving again an instant later.

Clawing your way out of a level with a vital team member only *just* alive, thanks to your squad of walking wounded, feels heroic. To come away with the prize is thrilling. It doesn't matter what it is. It'll be some unobtanium-coated MacGuffin. Who cares? I need it to go and hit something squishy with a metal stick. I lay awake in the depths of the night, plotting the perfect set of moves, and had to stop myself getting up to try them out. As I write this review to a deadline, I'm itching to get back to it.

In this, *King Arthur: Knight's Tale* succeeds despite itself. I won't be telling stories about my adventures to my friends, or buying a T-shirt, or quoting bits of it out of context, but that doesn't mean I won't keep enjoying its tactical tussles.

It is a shame that the game uses brutish grime in place of real depth – it feels unnecessary, and perhaps damning of an industry that often doesn't care enough about story and characterisation. It leaves me with mixed feelings on the overall game – part of me is really put off, but another part of me is going to make me go boot it up again the second I finish this paragraph. I've got endgame sidequests to do. ■

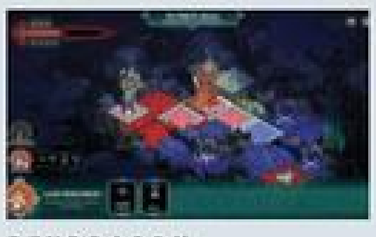
PC PowerPlay VERDICT

King Arthur: Knight's Tale is a strong turn-based RPG, but rough around the edges with an unpleasant story.

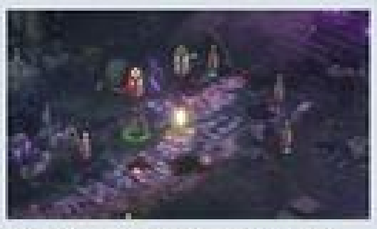
70

BATTLE ROYALE

Knight's Tale *is far from the only Arthurian game*



PENDRAGON
A narrative strategy game from the creators of *Heaven's Vault*, *Pendragon* lets your choices change the fates of Arthurian characters.



THE HAND OF MERLIN
A tactical turn-based roguelike, currently in Early Access, which puts you in the shoes of a dimension-hopping incarnation of Merlin.

TAINTED GRAIL: CONQUEST
Loosely based on a board game, this deck-building roguelike recasts Avalon as a kind of apocalyptic purgatory.

FAMILY VALUES

ROGUE LEGACY 2 joins its forebear in the roguelite hall of fame

By Anne-Marie Ostler

Back in 2013, the original *Rogue Legacy* won the hearts of many a roguelite fan, with a twist on the genre that saw failure go hand-in-hand with progress. And nearly a decade on, Cellar Door Games faces not only the weight of expectation that comes with creating a sequel, but competition from an army of titles inspired by its formula. Far from buckling under the pressure, the dev has crafted a follow-up that revitalises the series with fresh ideas.

Once again, you step into the shoes of a randomised hero tasked with navigating the levels of a procedurally generated castle. Said castle is a gruelling gauntlet teeming with tough enemies to defeat, tricky obstacles to overcome, and valuable gold to steal. If, or more likely, when your hero reaches the bottom of their health bar, you'll swiftly find yourself in the footwear of their descendant.

The varied mechanics mean that grinding never feels like a slog

At the start of each run, you're given a choice of three characters from an array of unlockable classes. Old favourites such as the Knight and Barbarian are mixed with exciting new options like the Gunslinger and Valkyrie. Classes now come with their own unique stats, weapons, talents, and passive abilities, making each feel distinctly different from the last. One of the most unusual and enjoyable new additions is the Chef class. Not only can they cook up a mean stew to replenish their health, but their trusty frying pan can inflict burn damage as well as deflect incoming projectiles like a deadly game of ping pong. However, some classes are considerably more effective than others, and I found myself passing up the less useful ones after giving them a few tries. For example, a lack of multidirectional aiming for spells meant the mage class sat on the bench for most of my time with *Rogue Legacy 2*.

Threatening you along your journey is a relentless horde of enemies. Some fill the screen with deadly projectiles, while others want nothing more than to whack you with a powerful melee strike. Enemies aren't your only worry; levels are a platforming labyrinth, filled with hazardous obstacles like spiked pits and flaming traps which require careful timing and patience to overcome. It's fast-paced and incredibly fun, and despite being bested many times, I couldn't wait to jump back in for another go.

The most significant addition to *Rogue Legacy 2's* family-orientated antics is the heirlooms. Once obtained, these helpful trinkets unlock traversal abilities, including a double jump and an aerial dash that allow you to reach new locations. As well as adding a delightful metroidvania element to the game, this expanded moveset gives you more evasive options when it comes to avoiding damage from enemies and other dangers.

NEED TO KNOW

WHAT IS IT?
A cheerful and challenging dungeon crawler where death is a good thing.

DEVELOPER
Cellar Door Games

PUBLISHER
In-house

REVIEWED ON
Intel Core i7-11700K, GeForce RTX 3070, 16GB RAM

MULTIPLAYER
No

LINK
roguelegacy2.com

GENERATION KILL

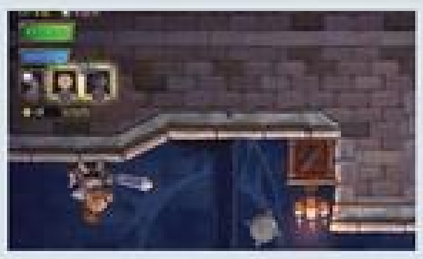
Roguelites, by their nature, involve a lot of repetition, but *Rogue Legacy 2* goes to impressive lengths to ensure that it never feels like a slog. The upgrade system offers numerous and varied enhancements that add more than mere buffs to your stats. Your hard-earned gold can also be spent unlocking new classes, merchants, and game-altering upgrades such as the Architect and an adoption centre. Eager to see what interesting new upgrades were available, I was often strangely excited at the prospect of my hero's demise.

Rogue Legacy 2 doesn't deviate hugely from the genre's well-worn formula, but it does what every good roguelite should: entice you back for more. You'll settle in for just one run, and find that you're unable to put down the controller when met with the all too familiar death screen. Instead, you choose yet another heir, promising yourself that, this time, you'll conquer the castle.

Cellar Door Games' latest stands among the finest in a genre it helped define. The demanding yet endlessly entertaining gameplay, fuelled by a rewarding progression system, is as absorbing as it was the first time around. While the enhanced visuals, bolstered character options, and delightful traversal abilities make for a sequel that not only lives up to its predecessor, but easily surpasses it. ■

HEIRY SITUATION

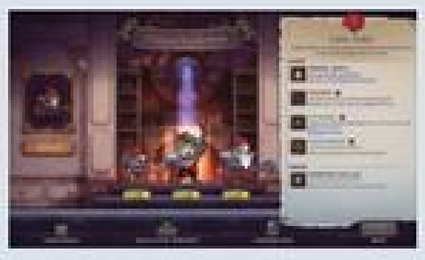
Traits that'll spice up your adventure



VERTIGO
Having a hero with this trait literally turns your adventure on its head.

SYNESTHESIA
Bored of bland rooms? Leave a dazzling trail of colour everywhere you go.

DIVA
Unleash your star power with a spotlight that darkens everything but you.

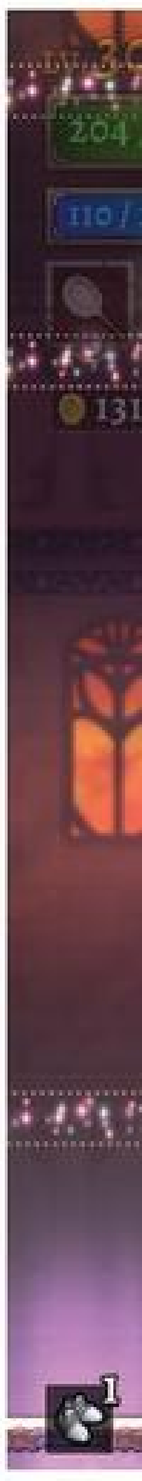


GIGANTISM
Gain massive size and reach but also become a much bigger target for enemies.

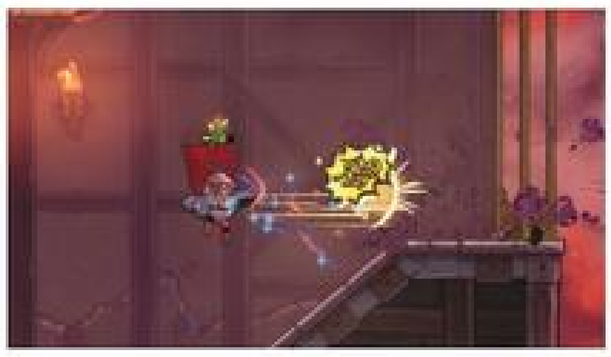
PC PowerPlay VERDICT

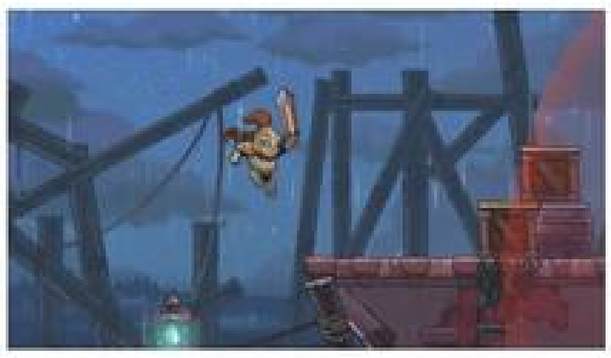
This sequel is a sublime addition to the *Rogue Legacy* family and one of the best roguelites I've played so far.

88



These snowflakes might look pretty, but they're also razor-sharp.





ABOVE: Spin kicking a lantern lets you soar to new heights.

LEFT: The boxer's rapid punches make this class a real knockout.

Later levels are inaccessible until you've got the necessary gear.

RIDE ON TIME

MOTOGP 22 looks back at an historic season in style

By Phil Iwaniuk

Modern MotoGP is in a golden era. 2021 saw eight different winners across 18 races, and so far this season we've had three different riders on the top step in four races, including two taking their maiden victories. It's unpredictable, packed with talent and spectacle, and guaranteed entertainment every race. Naturally, then, the focus of Milestone's licensed bike sim *MotoGP 22* is the 2009 season.

An all-new mode, titled Nine: Season 2009, takes you back to a bygone era when Rossi, Lorenzo, Stoner, and Pedrosa jostled their 1,000cc machines around each other for the wins, by way of a documentary-style video series directed and narrated by filmmaker Mark Neale, and a series of challenges intertwined between them.

The challenges are straightforward, the objectives always focusing on either overtaking or gapping opponents. But you're right there, among a full grid of 2009 riders, listening to a classic inline four screaming its lungs out and looking for a gap between Rossi's knee and the apex. Truthfully, for those with even a passing interest in the sport, that's really enough.

That's not to say Milestone shirks any responsibility in simulating the current season. As ever, all three categories of racing are present, correct and resplendent in 2022 liveries. And as ever, that lends a depth to its career mode that not even Codies' *F1* games can quite match. When you finally move up to the premier class you feel like you earned it, like there's a story to how you got here. It remains the biggest pull of the series, even with the inclusion of the 2009 season playable doc this year.

Milestone has addressed the braking difficulty this year

Mastering the bikes, meanwhile, is a little easier. Last year's title veered so far off into hardcore sim territory that even months after release I was still routinely outbraking myself, tucking the front, and squirming around in braking zones like those inflatable men they put outside car dealerships. I wasn't alone. Milestone has addressed the braking difficulty this year, but not in a manner that feels particularly satisfying.

Essentially there are just extra levels of assist now. Before you either admitted defeat, turned on combined braking, and got on with it, or persevered with committing an impossibly deft series of inputs to memory. Now there are additional options to modulate your inputs, the upshot of which makes the handling more forgiving at the cost of control. Turn on the modulation and you simply can't lean in rashly enough to tuck the front, which saves you a crash but also feels a bit too much like an autopilot mode.

New assists aside, wrestling a bike around a circuit still feels extremely challenging, and with ride height devices to play with now along the straights, there's an extra wrinkle to mastering the controls. It's not completely convincing – ride over a bumpy apex, watch the insane Buckaroo ride that occurs in its aftermath, and the illusion of simulation is shattered – but it feels

NEED TO KNOW

WHAT IS IT?
The latest officially licensed MotoGP racing sim.

DEVELOPER
Milestone Interactive

PUBLISHER
In-house

REVIEWED ON
I7 9700K, RTX 2080 TI, 16GB RAM Windows 10

MULTIPLAYER
Yes

LINK
motogpvideogame.com

ABOVE: Manual race starts are a bit easier this year, and now feature holeshot devices.

Ennea 'The Beast' Bastianini. Are we looking at the next world champion?

TOP: The sense of speed is, as ever, absolutely spot on.

ABOVE: Dani Pedrosa, bravely pushing past his injuries to take the chequered flag.

FAR RIGHT: Despite Binder's fury, photobombing is allowed and thus Rins faces no penalty.

amazing to get the point of tipping the bike in *just right* and make the apex, carrying a ton of corner speed and gliding past an opponent. In those moments, all is forgiven.

ON YOUR BIKE

Harder to turn a blind eye to, though, are some irritations that really should have been fixed by now. The ideal line assist is often totally off with its recommended braking points, and AI is inconsistent in pace from track to track, as though it's adhering to poorer lines on some circuits.

It makes inroads, then, this new *MotoGP* title. It's still feeling a little wobbly in the hands, as though the controls and physics model haven't yet been perfectly synchronised, and the AI and assists need more work. But Mark Neale's work really elevates the experience, creating a new mode that sets the mind racing with ideas for more like it. How about one that recreates each of the last ten race winner's maiden victories? Who wouldn't want to be put on Binder's KTM in a sodden RedBull Ring, or Bagnaia's Ducati, fending off Marquez around Aragon? There's a lot of tread on these tires. ■

PC PowerPlay VERDICT

A doc format worth expanding and repeating, more assists, same rough but rewarding superbike racing.

76

NINE LIVES

The big players in MotoGP*'s quasi-documentary*

VALENTINO ROSSI
At the time an eight-time champ who'd just returned to winning ways after Hayden and Stoner won in '06 and '07.

JORGE LORENZO
So good in his debut Yamaha season that Rossi had a wall built between them in the pits. 2009 was war between the teammates.

CASEY STONER
The Ducati rider won the championship in 2007, then Rossi found a way to beat him to the '08 title. It was everything to play for in 2009.

DANI PEDROSA
The Spaniard dominated 125s and 250s, but battled injuries throughout his MotoGP time, and was looking to step up in '09.

MOSTLY HARMLESS

You may need a Babel Fish in your ear to understand GALACTIC CIVILIZATIONS IV

By Rick Lane

This latest sequel in the long-running strategy series bills itself as the most accessible entry yet. This is true, in the same way that the tail is the most accessible part of a tiger. Stardock's long running 4X series officially has a tutorial now, in the form of a little robot helper accursedly nicknamed 'Space Clippy'. But Space Clippy doesn't help much when a game explains everything as if it's arrived from another dimension.

Take modules as an example. What are modules, you ask? Well, so did I. At first I thought modules were optional extras you could select to tailor your starbases (which act as both resource harvesters and deployable control points, with modules helping improve those functions in various ways). But then I ran out of modules, whereupon I realised they are in fact a consumable resource. Yet unlike almost every other resource in the game, which are either harvested in space or produced on planets, modules are constructed at shipyards. Oh, and you can only construct modules once you've researched the relevant technology, itself an issue for reasons I'll get into later.

As with many other systems, *GalCiv* never properly explains any of this. Space Clippy just points you to various menus like a dismissive waiter in an alien restaurant. The irony is *GalCiv IV* is not as obtuse as it seems. It's just terrible at communicating, which means that enjoying the game at its best involves a lot of false starts.

GalCiv IV introduces a new victory condition called Prestige

This isn't merely about understanding individual systems: it's also about how key features are presented. Take the game's biggest new idea: sectors. Rather than display its universe as one vast expanse of stars, *GalCiv IV* splits the cosmos into self-contained bubbles, connected to one another by subspace warps (aka space roads). You can play on randomly generated maps with around a dozen of these bubbles, each of which has roughly 30 stars in it.

This lets Stardock proclaim *GalCiv IV* to be the largest game in the series ever. Yet while visually impressive, playing at this scale isn't all that fun. 'Galactic'-size games are painfully slow, while ship management becomes extremely fiddly as you're constantly having to zoom in and out to issue orders to individual fleets.

NEED TO KNOW

WHAT IS IT?
A colourful and intimidatingly deep space 4X game.

DEVELOPER
Stardock

PUBLISHER
In-house

REVIEWED ON
AMD Ryzen 5 3600, GeForce RTX 2080 Super, 32GB RAM

MULTIPLAYER
Yes

LINK
galciv4.com

SPACE IS BIG

GalCiv is more fun on smaller maps. Not only does the game move faster, with empires forced to rub shoulders more, but the strategic importance of sectors becomes more acute, as those space roads connecting them turn into highways that can be monitored (although not completely blockaded) to help defend your empire.

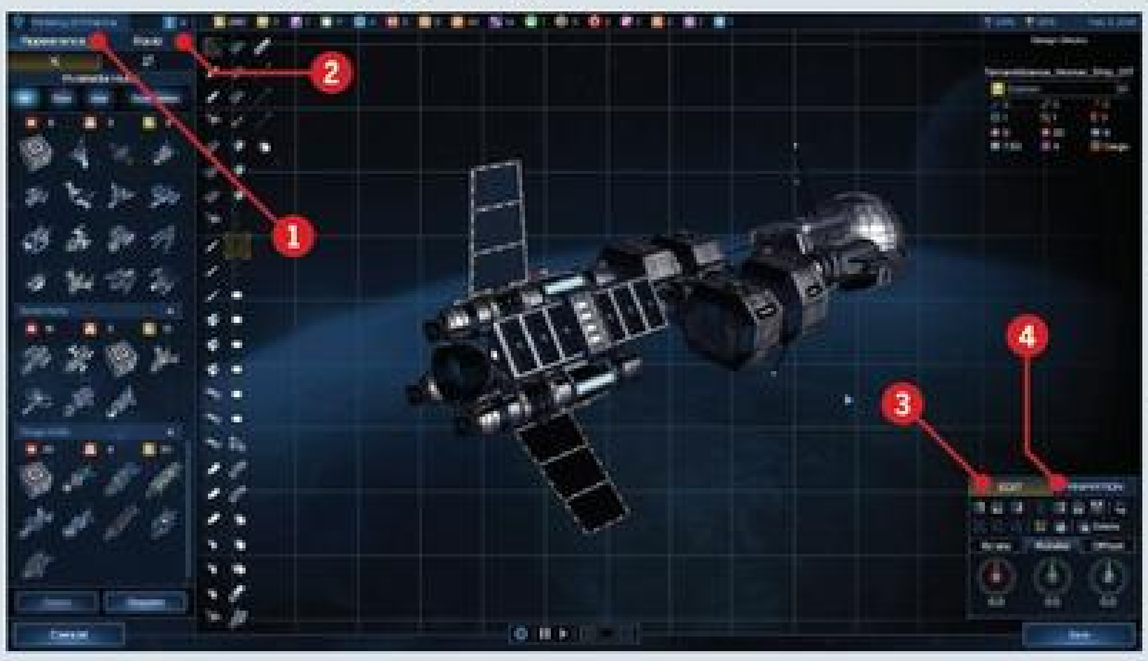
Not that keeping invaders out will guarantee victory. *GalCiv IV* introduces a new victory condition called Prestige. This tracks how awesome your empire is in a wide range of categories, awarding you prestige points to reflect how good your military or research or tourism industry is. Gain sufficient prestige points, and you win the game.

This helps facilitate non-violent victories and prevents larger-scale maps from descending into wars of attrition. You can also gain prestige bonuses by completing a range of quests that replace the standard campaign of previous games, unlocking as your civilisation meets certain criteria. This lets you experience the 'story' of *GalCiv IV* without being forced to play as a specific faction.

Those welcome additions are accompanied by the distinction between colonies and core worlds. Core worlds are planets managed by you directly. You assign a governor to them, construct productivity-boosting buildings on them, and have the option to build a starbase nearby.

SHIP SHAPE

GalCiv's 4's ship designer offers extensive customisation for your spacecraft

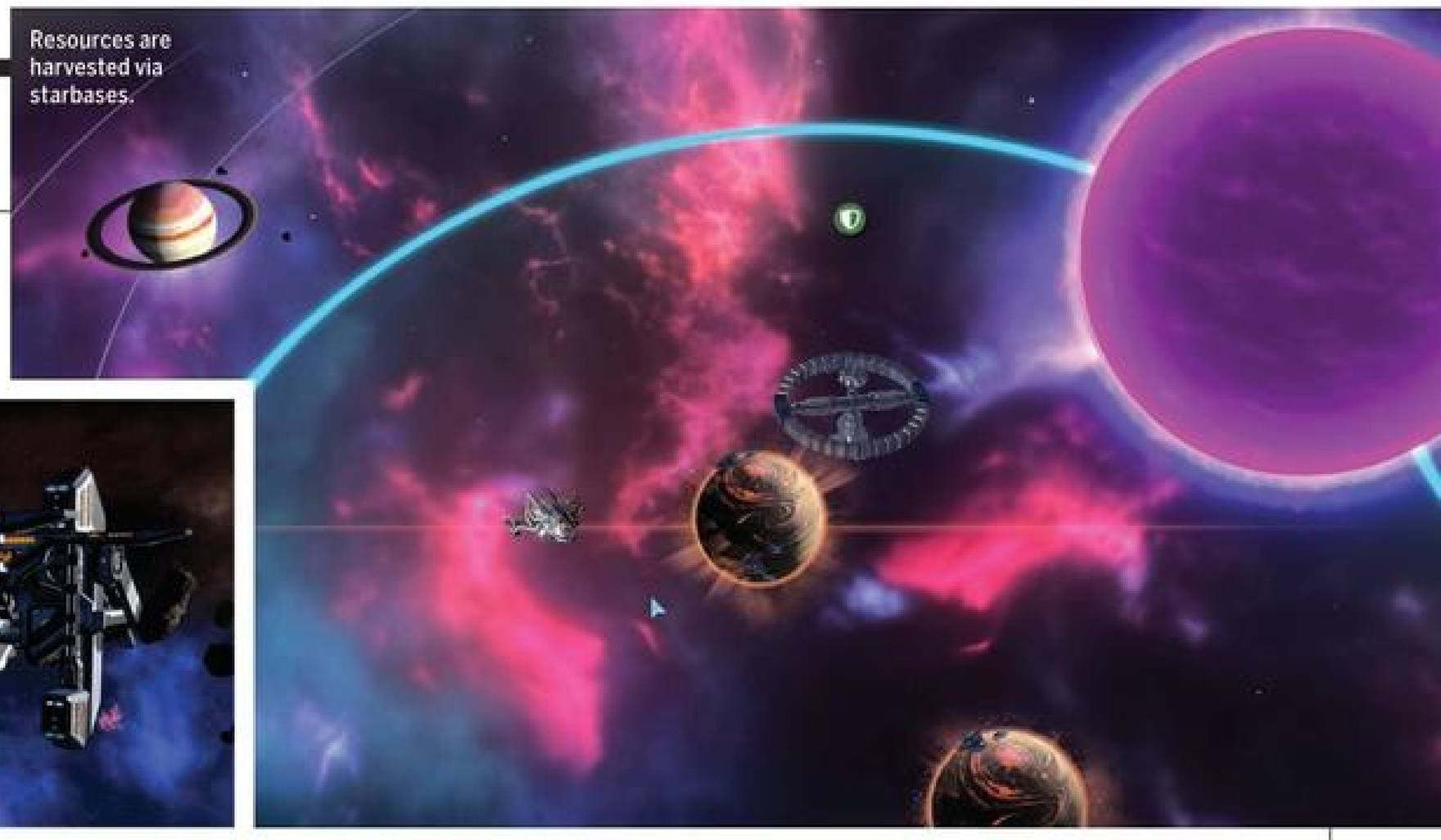


1 APPEARANCE
Lets you pick from ship presets or individual parts.

2 EQUIP
Allows you to choose thruster-type, weapons and so on.

3 EDIT
Allows you to adjust the scale, position, and shape of individual ship parts.

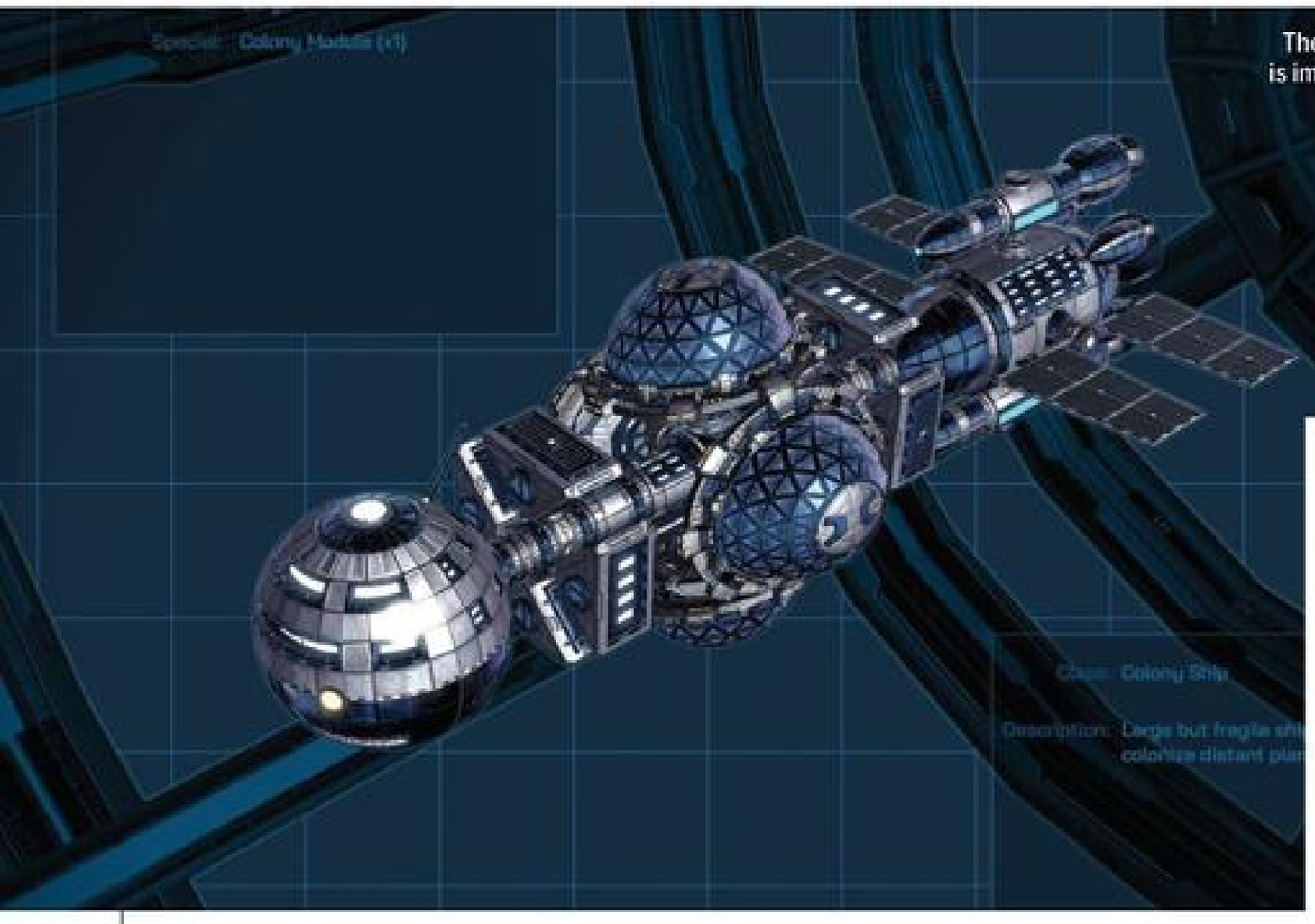
4 ANIMATION
Enables adjustment of elements such as rotating sections on the ship.



FAR LEFT: Just don't call it a Furby.

LEFT: Core worlds can be improved with buildings.

BELOW: Colonies can be sieged with a single starfighter, which is a bit silly.



The array of ship designs is impressive, and you can even make your own.

RIGHT: Unlike *Crusader Kings*, decisions rarely have follow-up consequences.

FAR RIGHT: Your circle of influence expands over time.

BELOW: "Hi, I'm the Festron Hunt. You might remember me from such films as John Carpenter's *The Thing*."

Colonies, on the other hand, require no direct management, simply funnelling their resources to the nearest core world.

The idea is to reduce your management duties from upward of a hundred planets to perhaps a dozen or two. And it works – or at least, it does once you've figured out how to effectively differentiate between colonies and core worlds. A colony becomes a core world when you assign a governor to it, so functionally it's up to you to decide. But only worlds with Excellent ratings or above are worth turning into core worlds. Since the game doesn't tell you this, it's easy to rush into colonising a bunch of barely habitable backwaters while the AI nicks all the good planets from under your nose, snout, or proboscis.

The 'proper' way to establish core worlds is slow and involved

The 'proper' way to establish core worlds is slow and involved, and you may find yourself more inclined to direct intervention. Conquering other empires is mechanically straightforward: you just click on a fleet or planet to attack it, then wait until the battle or siege is resolved. Again, though, *GalCiv* fails to mention that core worlds can only be conquered after researching a specific technology called Planetary Invasion. Colonies, on the other hand, can be snatched at any time with any ship, even a lone starfighter. If anything, this goes too far the other way, with wars descending into glorified pest control unless you ensure all colonies have a couple of ships stationed to defend them.

Once you've parsed *GalCiv IV's* garbled attempts to communicate with you, the universe feels sufficiently weird and ripe with possibility for a sprawling sci-fi sandbox. Not simply in the various races you encounter, which range from fleshly mantis-like creatures who thrive on oceanic worlds, to armies of sentient robots who don't need food to survive, but also in the many anomalies that you can scan for minor rewards – such as ships you can patch up from wreck sites, or strange artefacts that provide you with useful one-off powers.

As your empire develops you'll unlock a range of 'executive orders', special edicts that can instantly recruit a new colony ship, boost your income, or reveal a new system on the map. In a game where progress is highly gradual, these quickfire bonuses offer a satisfying immediacy. In one instance I used an artefact to give a colony ship an extra move, helping it evade a fleet of pirates and beat a rival vessel to the best planet in the sector.

DEEP THOUGHT

As the game unfolds, your avenues of approach become more varied. Diplomacy, for example, initially seems limited, and it's difficult to get anything resembling a decent deal from other factions. As you gain access to better diplomacy tech your options for forming different relationships and alliances expand considerably. There are still issues though, like enemies who sue for peace during a war while refusing to offer any incentives for you to stop. Indeed, while most of *GalCiv IV's* 'problems' stem from poor onboarding, there are a few other black holes visible amid the background glow of competence. By far the biggest of these is how the game approaches research.

GalCiv IV's tech tree is more of a tech arboretum, so to make decisions easier, the game presents you with several new techs, pruned semi-randomly from the tree, to pick from as your next research project. This works fine until you actively want to pursue a specific tech, like, say, the Planetary Invasion system I mentioned earlier, which is an important mechanic to leave to the whims of chance. You can trade tech with other races – which is how I eventually got it – but they have to be willing to trade it with you, a situation by no means guaranteed.

SO LONG...

More broadly, *GalCiv IV* doesn't have much of a hook compared to other space 4X games. There's little here you haven't seen done better in, say, *Stellaris*, such as the nuggets of narrative tied to anomalies. Other new features, such as the *Crusader Kings*-style relationship you have with Governors and Citizens, are highly simplistic, basically meaning that a planet might abandon you for another faction if you let the Governor's opinion of you drop too low. The ship editor is nice, going well with *GalCiv IV's* general visual snazziness. But it's very much an auxiliary feature, with little meaningful impact on the main game.

Galactic Civilizations IV is like an ancient alien race awakening to find a bunch of pioneering little upstarts have hit the scene, all buzzing around with their hot new spaceships and innovative ideas. Its response to this is to go big, but it's also broad and conservative. Space Clippy represents a token effort to make contact, but *GalCiv IV* ultimately doesn't really care if the message is understood.

But then it's got a legacy spanning decades. It doesn't *need* your approval. It's *GalCiv*. ■

PC PowerPlay VERDICT

A vast and dependable grand space strategy. But there's little here that's radical, and expect to meet it halfway.

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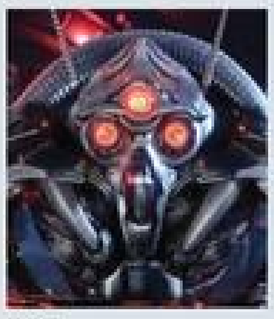
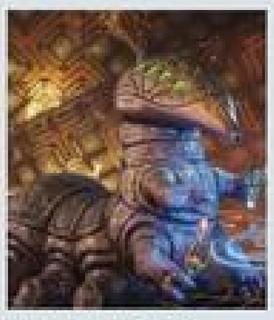
FACTION REACTION

A quick guide to some of the weirdest factions



YOR SINGULARITY
An entirely synthetic race that doesn't eat food and doesn't care about approval. Ideal for new players.



NAVIGATORS
Navigators excel at science and exploration, but are less good when it comes to fighting and diplomacy.

DRATH
Tough looking dragon-people. The more money they have, the happier their citizens are. Sounds about right.

XELOXI
The Xeloxi Civilization is comprised entirely of criminals, which seems a bit prejudiced, really.

SWEENEY SHOD

A nice concept with bad ingredients makes for a disappointing dish in **RAVENOUS DEVILS**

By Ben Tyrer

Taking inspiration from an unusual source, *Ravenous Devils* is a cooking strategy game with a twist – the meat you use comes from the people you kill. However, it's so keen for you to get the joke that there's a reference to a barber in the opening. So just in case it wasn't clear, this is Sweeney Todd: The Game. Sadly, the promise this concept inspires is fleeting, as you discover that running a capitalist cannibal empire is surprisingly dreary.

Setting up shop in an appropriately squalid building, the murderous couple at the centre of this is Percival and Hildred. Percival, a tailor instead of a barber, spends his day selling clothes and murdering his clients. Hildred runs the pub underneath, using the bodies Percival sends her way as the filling in the meals she makes. You manage their working day, with your attention split between the two equally.

Controlling them is straightforward, as you simply scroll up and down to see each floor of the building and then click on the object you want them to interact with, but the challenge theoretically comes from juggling their differing demands. Hildred might need you to deliver some fresh pies, while Percival needs a hand mopping up his latest murder mess. For a game with such ugly subject matter, it at least manages to conjure some effective visual touches, from the steam trails of freshly baked pies to the queasily vivid mutilations that Hildred performs when making steaks out of patrons. If only the attention to detail in these animations was matched in the rest of the game.

Ravenous Devils struggles to make anything engaging with this darkly appealing setup. For starters, there should be something taxing about dividing your attention between two businesses, but the tasks between them are so limited, you never feel under pressure. Percival's main jobs are to murder and make clothes – as well as getting the ability to grow vegetables later on – while Hildred's focus is prepping and selling meals, with a smattering of different recipes that can be unlocked when you buy new equipment. What also makes the strategy feel stale is that the flow of customers is pretty predictable, especially later on when I knew I would get three people a day to murder with Percival, making it easy to know when to divide my attention between the pair, rather than feeling like I was making split-second judgements.

It struggles to make anything engaging with this darkly appealing setup

This absence of peril can be felt across the entire game. Because your day won't start until you actually open up the store, you can take as much time as you need to prepare, stocking up on everything you need and processing bodies away from the hustle and bustle of a regular day. You can even get a cat that will hunt rats for you if you're running low on meat to sell to customers. While the tasks you complete in this downtime won't completely get you set, it does feel like you're making an already gentle challenge even milder.

NEED TO KNOW

WHAT IS IT?
The answer to the question, "What if Sweeney Todd was a cooking game?"

DEVELOPER
Bad Vice Games

PUBLISHER
In-house

REVIEWED ON
Intel i5-4690K, GeForce GTX 970, 16Gb RAM, Installed on SSD

MULTIPLAYER
No

LINK
bit.ly/3kXSohp

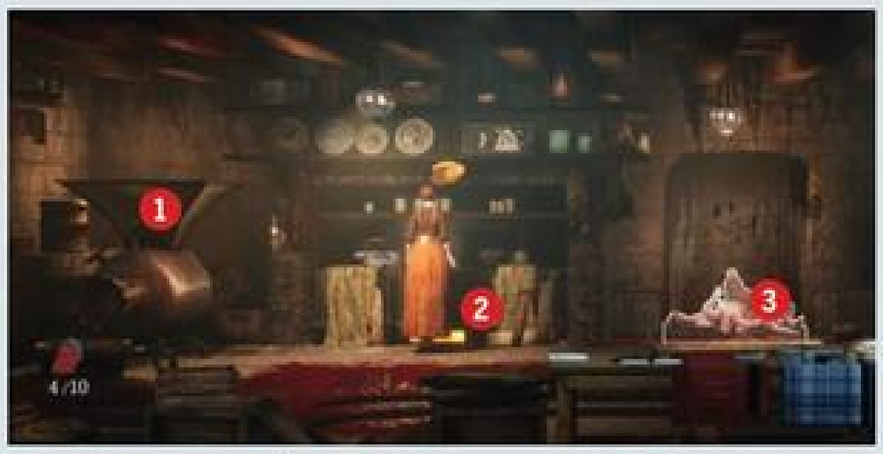
SHOP OF HORRORS

There's at least some intrigue with the upgrades you can unlock for your little boutique of debauchery, such as hiring a server to gather orders rather than making Hildred scurry up and down stairs, or unlocking a greenhouse where you can grow vegetables, but they never manage to change the core flow. Despite the occasional visual flourish, the strategy never truly grips; you never feel like you're moving off auto-pilot once you've got the hang of it.

Away from the action, the game's story has a similar problem with not fulfilling its potential. While the narrative has a grimly amusing edge – a mystery man blackmails Percival and Hildred into killing people he wants to eat – it's blunted by lacklustre writing that relies on tired clichés and unpleasant characters. While no one would expect to enjoy the company of a pair of homicidal chefs, the couple aren't funny enough to amuse, nor believable enough to intrigue. With a sharper story or more incisive strategy, this could have offered a grimly entertaining take on restaurant management sims. Instead, *Ravenous Devils* just ends up feeling undercooked. ■

ANATOMY OF A KITCHEN

Here's how the sausage is made... literally



1 GRINDER This ominous contraption gobbles up bodies and spits out mince. Hildred keeps mentioning how little she actually cleans it, which is surely going to impact her establishment's hygiene rating.

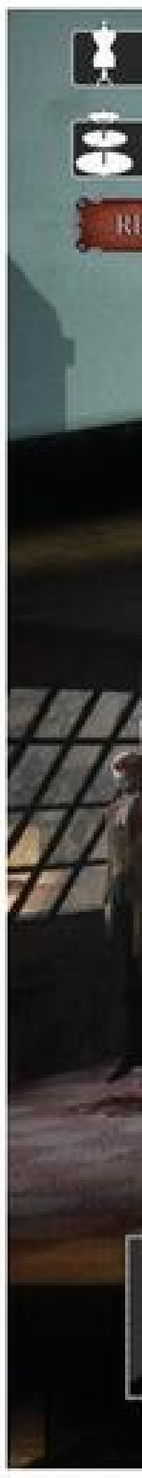
2 OVEN Where meat and flour are transformed into the best pies (that are made from humans) you can buy. While that kitchen might look unwelcoming, what with all the viscera, at least the ovens work well.

3 BODIES Surely every London kitchen has a hole for where the bodies can pile high? While it might not look like the most sanitary option, rest assured that with business booming, they don't stay there for too long.

PC PowerPlay VERDICT

Unfortunately *Ravenous Devils*' fun concept is squandered through rote strategy and charmless writing.

46



Hand-drawn cutscenes bookend the story.

No, Percival isn't feeling remorse, he just can't stand his clients.

LEFT: The recipes might be basic, but at least the doodles are fun.

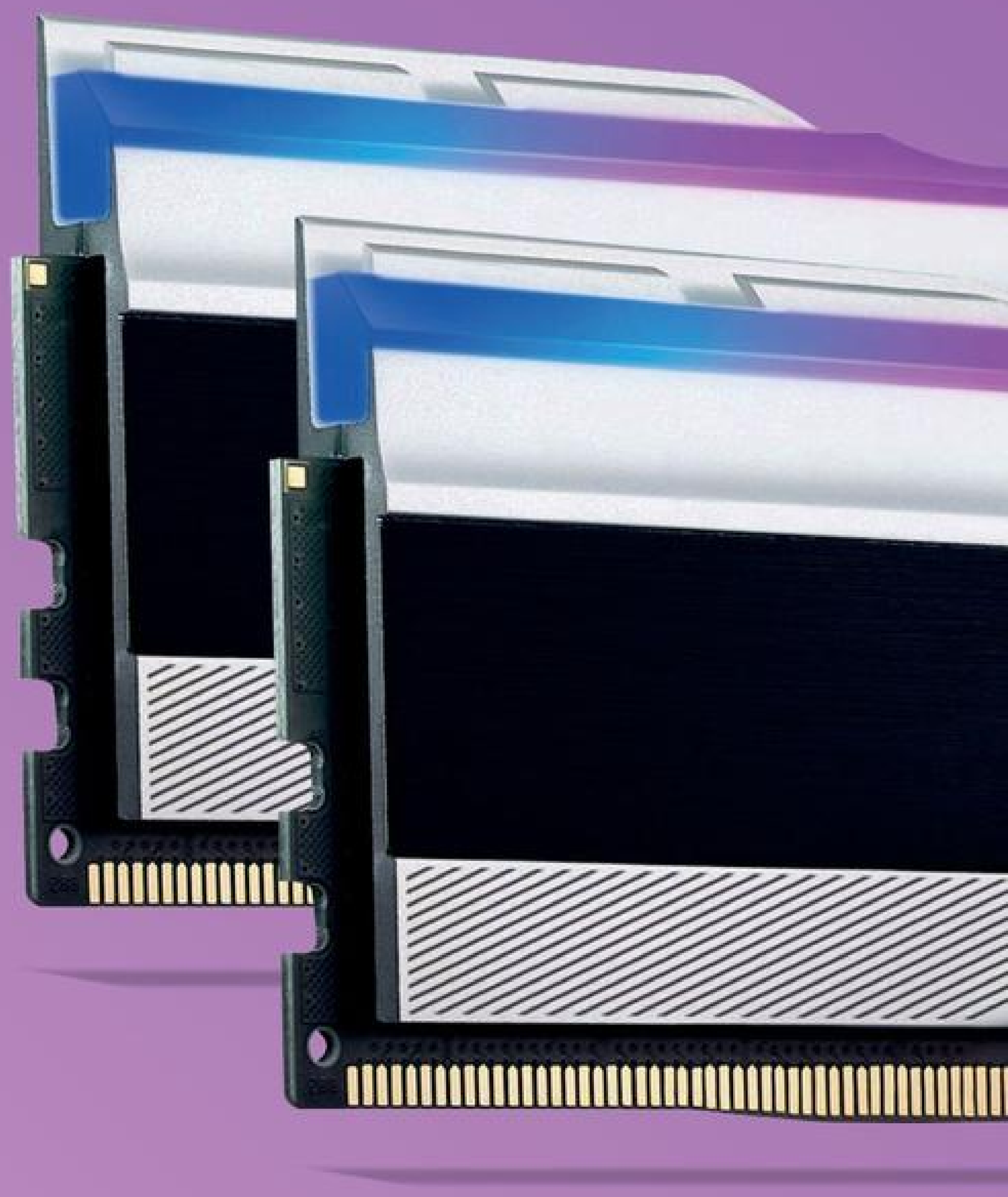
BELOW: Guess what goes in that bathtub? Yes, more dead bodies.

GROUP TEST

DDR5 MEMORY

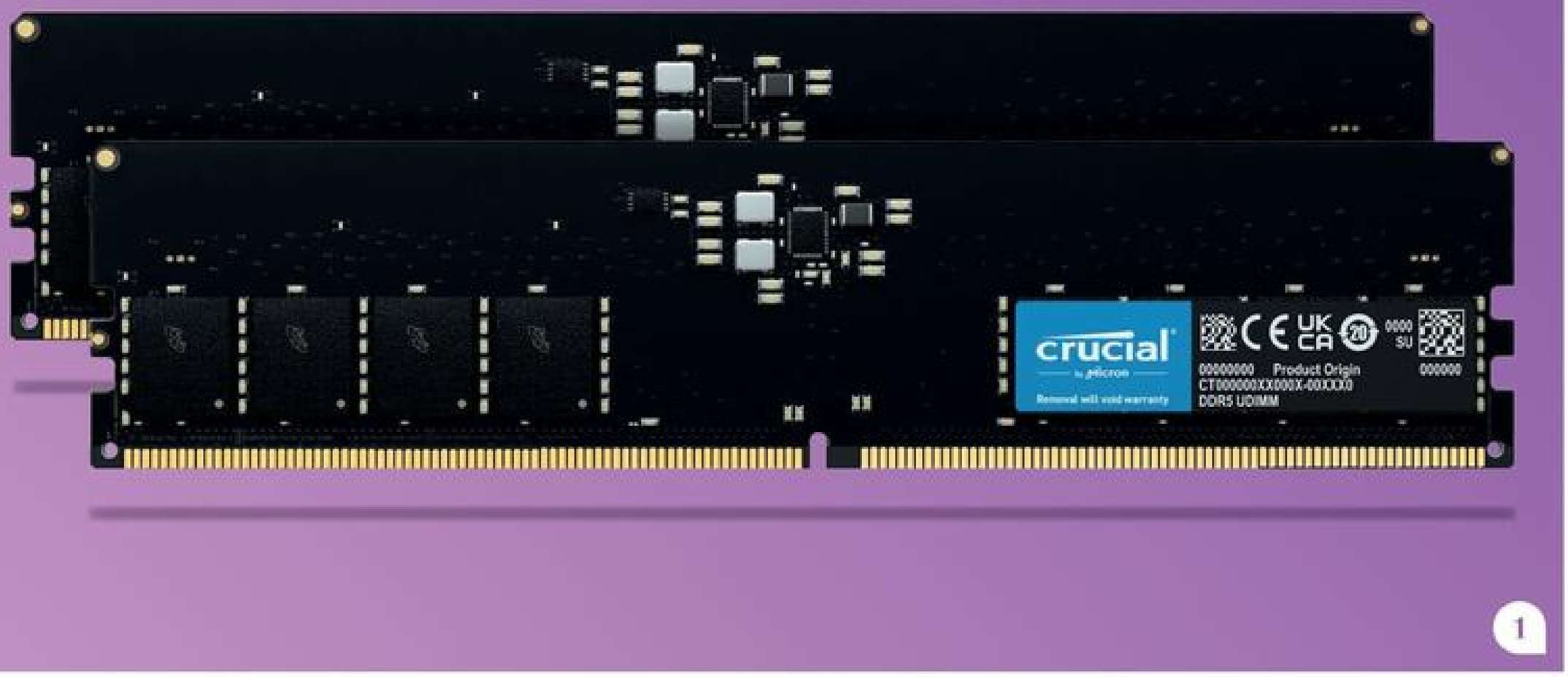
We've tested the top gaming memory to find out which to pair with your new gaming PC.

By Chris Szewczyk



If you're on the hunt for the best DDR5 RAM to pair with your shiny new Intel 12th gen system, you've come to the right place. We've tested many DDR5 memory kits over the last few months ourselves and we've picked out the top kits, at different price points, to suit systems at different performance levels.

Back when DDR5 made its debut, it was expensive and very difficult – if not impossible – to find in many markets. That's all changed now, and while DDR5 remains expensive compared to DDR4, it's nice to see a PC component trending downwards in price, instead of up. In general, spending big money on RAM isn't recommended unless you have a high-spec rig to use it with. As prices fall though, you may find dropping a few extra dollars is worth spending to look at, say, DDR5-5600 rather than DDR5-4800. Some games and applications will respond to the extra speeds while others won't gain much, if anything at all.



1

DOES DDR5 RAM MAKE A DIFFERENCE FOR GAMING?

The answer depends on what speeds and latencies we're talking about. Games tend to be sensitive to latency, where lower is better. This means a good low latency DDR4 kit is still a perfectly viable gaming option. However, the real-world performance differences are small, and non-existent in GPU limited scenarios which is usually the case unless you're chasing very high frames per second.

If you have a good DDR4 kit, lets say a 2x16GB DDR4-3200 C14 kit or better, there's little reason to spend the money to upgrade to DDR5 for gaming.

The higher bandwidth of DDR5 is beneficial in other areas though, particularly in creative type applications. DDR5 uses less power, 32GB is generally the baseline and a DDR5 system is better for future proofing. As time goes on, we can also expect faster and lower latency kit.

Trident Z5 RGB

G.SKILL **$589**

Overkill kit for high-end systems

1 G.Skill rarely makes a misstep when it comes to high performance memory. The company consistently delivers fast kits that end up on the shortlists of gamers, enthusiasts, and us. Its DDR5 offerings are no different, and this Trident Z5 DDR5-6000 with its 36-36-36 timings really hits the sweet spot for high frequency and tight timings.

The kit is available in both black and silver finishes. Its futuristic look and RGB implementation look fantastic with its lovely diffused light bar along the top of the shroud. Some eyeball-scalding individual LEDs can be a bit over the top, but actually that's not the case here. The price of this kit has come down a long way from its steep launch price. In fact it doesn't cost all that much more than a decent 5,200MHz kit, and with its extra speed and tighter timings, it's an easy recommendation. You get great performance, looks and, surprisingly, actually now value for money. It's widely available too! What a world.

PC PowerPlay VERDICT

- → High speed and tight timings
- → Eye catching design
- → Consistently falling price

SPECS **SPEED:** 6000MHZ / **TIMING:** 36-36-36-76 / **CAS LATENCY:** 36 / **VOLTAGE:** 1.3V / **DIMMS:** 2X 16GB

DDR5-4800

CRUCIAL **$720**

PC PowerPlay SMART BUY

First in value, last in style

2 If you're after 64GB of DDR5, your options are limited. The Intel Alder Lake memory controller struggles with high density configurations, which is why there are very few 2x32GB kits available. The Crucial DDR5-4800 2x32GB kit is as generic as it gets, but if you need a lot of RAM for whatever task you want to throw at it, it's a great choice.

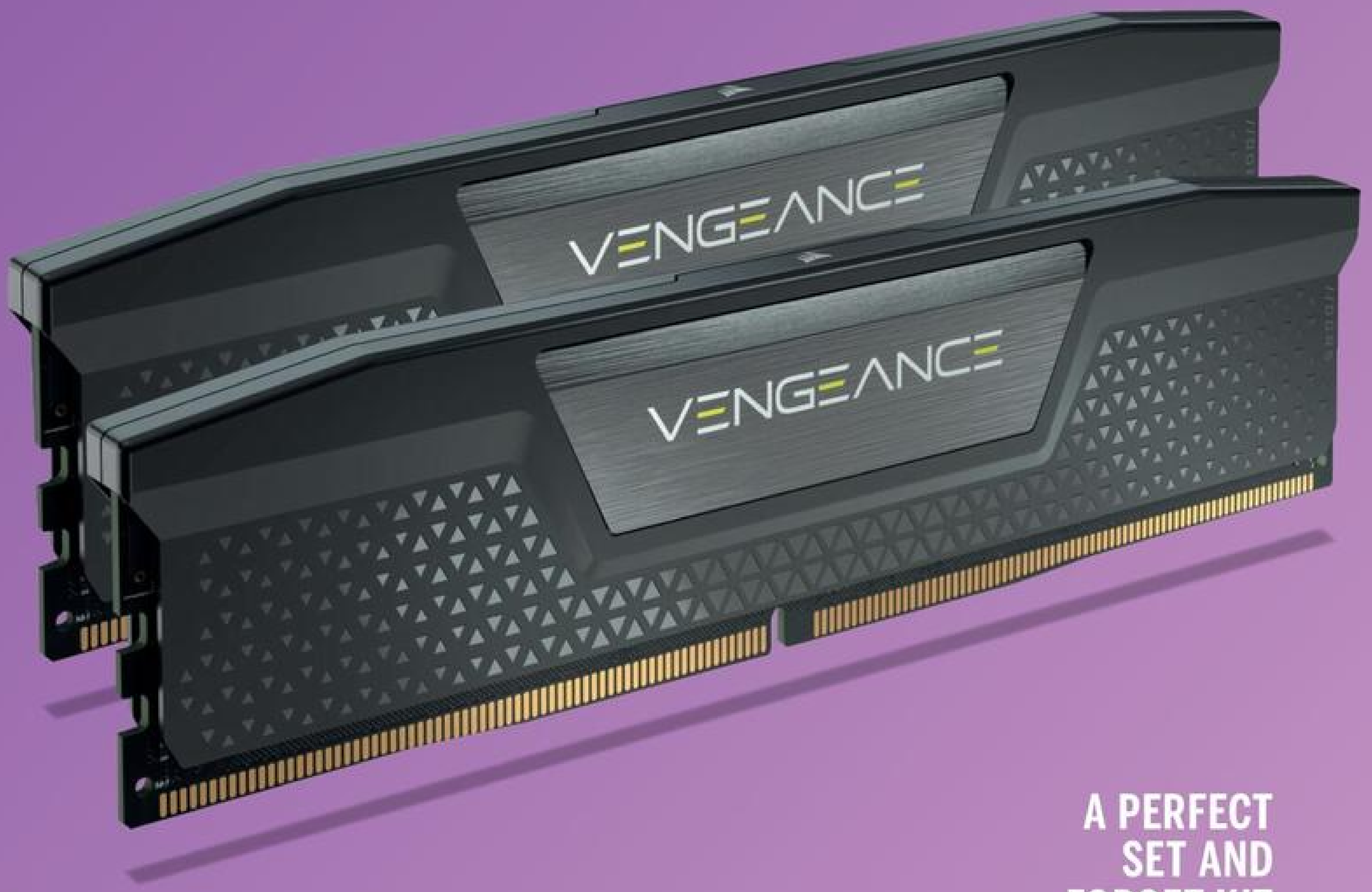
During our testing, the Crucial kit threw up a few surprises, sometimes matching a 5,200MHz kit thanks to its dual rank design. Add to that its low operating voltage and surprisingly good value for money, and it's a good solid kit for work or play. It's the kind of kit that will have a long life, too. In a few years from now, 64GB will still be more than useful.

The Crucial Ballistix name is no more and this bare PCB kit won't win any beauty contests or set speed records. It really is just a couple of boring sticks of RAM. But as a set and forget kit for an alt-tabbing gamer or workstation user, it's definitely worth a look.

PC PowerPlay VERDICT

- → 64GB for a dent price
- → Bland and generic design
- → Call that a brand name, Crucial?

SPECS **SPEED:** 4800MHZ / **TIMING:** 40-39-39-77 / **CAS LATENCY:** 40 / **VOLTAGE:** 1.1V / **DIMMS:** 2X 32GB



3

A PERFECT SET AND FORGET KIT

Vengeance

CORSAIR **$379**

PC PowerPlay SMART BUY

An everyday RAM champion

3 The Corsair Vengeance DDR5-4800 kit isn't the fastest you'll come across but it's one of the best options for a budget DDR5 system right now. At 4,800MHz it's not a speed demon by any means, though if you're using it with something like an i5 processor and an older or mid range GPU, you'd be lucky to notice any difference outside of memory sensitive benchmarks.

It's not that much of an overclocking kit but if you don't mind upping the voltage a bit, we've had it happily purring along at 5,200MHz in testing, which adds a bit extra to its already excellent value. It's a perfect set and forget kit. At just 1.1V, it runs cool. It's a great pairing for a B660 build and its low height means it's a lot easier to use with large air coolers compared to many kits on the market. If you're on a tight budget and have decided to leave DDR4 behind, grabbing a kit like this instead of a higher speed kit and diverting the money to a better CPU or GPU will deliver tangible benefits.

PC PowerPlay VERDICT

- → Perfect for budget DDR5 builds
- → Easy to OC to 5200MHz or higher
- → Modest timings

SPECS **SPEED:** 4800MHZ / **TIMING:** 40-40-40-77 / **CAS LATENCY:** 40 / **VOLTAGE:** 1.1V / **DIMMS:** 2X 16GB

Dominator Platinum

CORSAIR **$479**

Show off

4 Corsair's Dominator kits hardly need an introduction, and these Dominator Platinum RGB kits really do look fantastic. The black aluminium heat spreaders are weighty and solid, and look the part alongside any high-end components inside your PC. The sticks are very tall though, so you'll need to make sure your cooler won't be impeded.

This kit runs at a speed of 5,200MHz with 38-38-38-84 timings at a voltage of 1.25v. That's a good sweet spot for a mainstream DDR5 system. Sure, it's still expensive compared to DDR4 and it does carry a bit of a price premium over non-RGB 5,200MHz kits but at this price, it offers a good level of performance. As it's a Corsair product, it's ready to be integrated into a Corsair iCUE system. You can easily sync the memory's RGB with a case, cooler or keyboard/mouse combo. If you're an RGB lover, you'll have loads of fun playing with all the colours and settings. You'll struggle to find a better RGB kit at this price.

PC PowerPlay VERDICT

- → Gorgeous looks
- → Tall, can cause issues in some cases
- → Limited OC headroom

SPECS **SPEED:** 5200MHZ / **TIMING:** 38-38-38-84 / **CAS LATENCY:** 38 / **VOLTAGE:** 1.25V / **DIMMS:** 2X 16GB

Fury Beast

KINGSTON **$389**

A tame beast

5 Kingston's Fury Beast kit eschews flashy RGB lighting and huge heat sinks in favour of a design that's subtle and discrete. Not quite the beast we were expecting, but if your PC is sitting under a desk, do you really need a lot of bling?

The Fury Beast DDR5 memory modules have a black PCB with a low height aluminium heat spreader. That's handy if you're installing these in a compact PC case with limited room. It comes with SK Hynix ICs which means there should be some OC headroom on tap, however, our sample wasn't all that capable, with a stable 6,400MHz being a struggle when we were testing it. That's likely just our particular sample though.

The real strength of the Kingston Fury Beast kit is its value for money. At the time of writing it is one of the cheapest 2x16GB 6,000MHz kits on the market, and that's likely still true by the time this mag hits the shelves. If you care about performance and less about bling, this is a DDR5 kit that's well worth a look.

PC PowerPlay VERDICT

- → High frequency
- → Relative value for money
- → Simple aesthetic

SPECS SPEED: 6000MHZ / **IMING:** 40-40-40-80 / **CAS LATENCY:** 40 / **VOLTAGE:** 1.35V / **DIMMS:** 2X16GB

T-Force Delta RGB

PowerPlay EDITOR'S CHOICE

TEAMGROUP **$699**

Engage maximum frequencies

6 The Teamgroup Delta RGB DDR5-6400 kit is one of the fastest memory kits on the market. it's the kind of kit that is overkill for most users, but if you're fortunate to be rocking a high-end overclocked system, then you owe it to yourself to grab a set of high speed RAM to get the most out of it.

The Team kit we tested featured SK Hynix ICs and it had some surprising overclocking headroom. If you're a bit adventurous with your voltages, this is a kit that can push towards 7,000MHz, even. We were able to hit DDR5-6667 with 36-38-38 timings, making this DDR5 well and truly a step ahead of DDR4.

The kit is available in either black or white. Its diffused RGB lighting looks great and we're pleased to say that its price is well under what it was originally listed for. It's still a pricey proposition, and definitely not for everyone, but if you're one of those who is considering something like an RTX 3090 Ti, then a kit like the Team Delta RGB DDR5-6400 is a no brainer.

PC PowerPlay VERDICT

- → Strong performance
- → Overclocking headroom
- → Lovely opaque RGB look

SPECS SPEED: 6400MHZ / **TIMING:** 40-40-40-84 / **CAS LATENCY:** 40 / **VOLTAGE:** 1.35V / **DIMMS:** 2X16GB

TECH REPORT

VR NOT AMUSED

Six years on from OCULUS RIFT's launch, has the platform broken through?

VR first gained momentum at the same time that 3DTV lost it. When Palmer Luckey launched a Kickstarter campaign for a new headset unit in 2012, panel manufacturers were still half-heartedly extolling the idea of families sitting around the telly in wildly expensive glasses, watching something between a discernible movie and a magic eye. Few of us were listening though. If we were never fully committed to that future before, the idea of fully immersing ourselves in a virtual environment thanks to this Luckey chap's new doohickey only accelerated 3DTV's demise.

The campaign raised over US$2.5 million from 10,000 backers by the time Mr Zuckerberg came knocking. At the time of Facebook's US$2 billion acquisition of Oculus in 2014, the mainstream press started taking notice. Arguably the most influential figure in tech evidently believed this headset was the future – perhaps we should too, the thinking went.

FUTURE SHOCK

Had you stopped and polled people at that moment, eight years ago now, and asked them where VR would be in 2022, their expectations of market penetration would likely have been about 1,000%. Not only was the Oculus Rift gaining massive media attention, smartphone giant HTC was rolling out a rival headset called the Vive and even Sony was getting in on the act with a PlayStation-compatible model that also used the previously redundant Move controllers. Few of those pollers would have predicted a 2022 that resembled our reality.

There have been mitigating factors in the intervening years that curbed VR's progress. Most obvious is the pandemic, which both created soaring demand for all gaming consumables and greatly inhibited their production. As early as February 2020, both Oculus and Valve announced that coronavirus was affecting production of their VR units, and that some shortages were to be expected. Like many tech firms, Valve relied on the Wuhan province in China for its manufacturing, which was one of the first regions globally to impose lockdown measures. That short-term disruption turned into a global semiconductor shortage as manufacturing facilities worldwide yoyoed in and out of restrictive measures. At the time in human history when consumers were perhaps most primed for a device that immersed them in virtual environments from the comfort of their own home, companies simply couldn't meet that demand.

VR sales worldwide saw a dropoff in 2020, according to analysis firm Statista, with 4.9 million units sold and 5.4

The first attempts

Long before Oculus, there was VPL Research. In the mid-1980s Jaron Lanier founded a company who prototyped headsets and gloves designed to put you in a virtual space, immersed in every sense. Lanier was the first to coin 'virtual reality', and VPL's haptic glove and full bodysuit proved as impressive as they were overambitious. The company folded in 1990.

FAR LEFT: *Half-Life Alyx* brings us closer to a treasured virtual space than traditional games ever have.

LEFT: Well they'd already put *Skyrim* on everything else, VR only made sense.

GOGGLE BOX *The big players in PC VR in 2022*

HTC VIVE PRO 2 $2,199
Massive FOV, massive resolution, 120Hz refresh rate. It runs a bit hot during longer sessions, though.

HP REVERB G2 $959
The huge 4320x2160 resolution rivals the Vive, but HP's offering doesn't quite have the FOV.

OCULUS QUEST 2 $529
Popular on the grounds of its affordability and convenience, it's also one of the quickest to set up.

VALVE INDEX AUD$TBA
The big boy. It does feel the most premium of the lot of them, but official Australian release is still delayed...

million sold the previous year.

VR can't blame its modest adoption rate squarely on the coronavirus pandemic, though. Manufacturers were failing to meet consumer demand consistently since the Oculus Rift first released on March 28, 2016. Oculus apologised to customers on April 4, a week later, that due to a component shortage it would be delaying shipments. Users reported having their preorders cancelled, or not being able to place an order at all. For its part, HTC followed suit with a very similar preorder experience, temporarily suspending its site in a bid, many believed, to keep the waiting list manageable.

That had a knock-on effect on developers, who have remained suspicious about developing for a platform with such specific requirements, a minuscule userbase, and a massive financial buy-in. Six years since Oculus Rift launched, what are VR's killer apps? *Half-Life Alyx* is a stupendous experience that speaks to all the platform's unique and transformative properties, but it exists in a field of one. Only Valve is rich enough, and by virtue of also being a platform holder, committed enough to make such a game. Even Sony hasn't gone as big – *Dreams* is the biggest first-party title under PSVR's banner. With all the respect in the world, Valve released a *Half-Life* game for VR.

VR CAN'T BLAME ITS MODEST ADOPTION RATE SQUARELY ON THE PANDEMIC

A FISTFUL OF HEADSETS

Is it as simple as a standoff between developers and consumers, each waiting for the other to incentivise their investment? Well, picture yourself as a studio head in 2022. There are three billion gamers on Earth. 1.8 billion of them play on PCs of some description. Just under 700 million play on consoles. Develop a game for one, and you can reasonably easily port it to the other. And then there's VR. Statista has the total number of VR headsets at 16.4 million. In order to produce a game for them, you'd need to work in a totally new way, on a platform hardly any developers have experience of. Which platforms do you pick for your next game?

And yet it has given us wonderful experiences. *Euro Truck Sim* is a zen garden of autobahn bliss. The aforementioned *Alyx* gives us *Half-Life 3* by another name. Indies like *Keep Talking* and *Nobody Explodes* show its vast potential, and even passable ports like *Skyrim VR* show us what our familiar franchises could be like, if VR really took hold.

And Mark Zuckerberg still believes it will. Even though Reality Labs (nee Oculus) operates at a yearly loss of over US$10 billion, Meta's vision of the future places VR at the absolute epicentre. It's where we'll live our entire lives, socialise, buy stuff, play, and work, Zuckerberg reckons.

Even after six years, the hurdles VR faces, as both a gaming platform and a dehumanising and alienating dystopia, are the same as they ever were. Scarcity of product. High pricing. Few enticing titles. The necessity for a decent-sized area of your house cordoned off specifically for use as a VR space. The closest anyone has come to addressing those massive issues is ditching the cables on the Oculus Quest. While Meta plots our ensnarement in its 'verse forever, as gamers we're still waiting for developers and platform holders to blink first. ■ ***Phil Iwaniuk***

TECH TALES

UNFAIR ADVANTAGE

PC HARDWARE makes us play better, say the ads – is it true?

Marketing around games has changed considerably over the last two decades. There are far fewer young women in lingerie trying to make a network adapter look sexy, for example, or gamers whose entire heads are exploding due to the intensity of the latest title. But in the realm of PC hardware, at least one maxim has remained more or less unwavering: buy this thing, and you'll magically see your own prowess as a gamer transform.

There's more sophistication to the message now. Esports team-endorsed products. MMO mice. MLG gamepads. Still, it boils down to the same idea PC hardware was sold on in the Razer Boomslang days: that there's some kind of linear relationship between money spent and k:d. And that ignores the greater truth about the reason we invest in our pastime: it brings us comfort and enjoyment to indulge in a little nook of escapism. And just like any leisure pursuit, spending the money is actually part of the fun.

However, we've all experienced some delighted moment when we discover we're actually much better at *Team Fortress 2* now we're not trying to aim on a laptop trackpad anymore, or that in the advent of a newly purchased GPU, *Battlefield V* is quite a bit easier at 60fps than 14. Extreme examples, but they get us wondering about where else we might squeeze extra kills, lap time, or XP without having to actually be better at the game.

Such was this writer's disposition during the peak of my CSGO habit. Here's a game that's been in circulation in various guises since 2000. The players you might meet on any given server may well have two decades of skin in the game. The standard of play is implausibly high. Languishing in the silver ranks, I looked for every possible marginal gain I could find. How much better could a few hardware upgrades really make me?

IN THIS CASE, OLDER, LOWER SPEC HARDWARE OFFERS THE ADVANTAGE

THE GOLDEN RATIO

Not being the first to think along such lines, I consulted the wealth of wisdom already out there on forums, pro players' streams and YouTube vids. Most serious players stretch a 4:3 aspect ratio out and run a 1280x960 resolution on a 16:9 panel. The idea is that by warping the image horizontally you make headshots easier, since heads are now rendered using more pixels. You lose some FOV at either side, but if an enemy appears over to the extreme left or right of your screen they've probably got the jump on you anyway.

I had to downgrade my 32-inch 16:10, 2560x1600 monitor to a tiny 23-inch 16:9 panel to achieve this. It was the opposite logic to that of the typical hardware ad – in this case, older, lower spec hardware offers the advantage. Personally, I didn't find myself getting any more headshots than before, though. Probably the shrink down in panel size offset the potential benefit to stretching a 4:3 image out.

Next: frames per second. The theory to this isn't complicated: the more frames of information about an enemy's exact location are available to you, the more accurately you can track their position with your crosshairs and, ultimately, make them go on the floor.

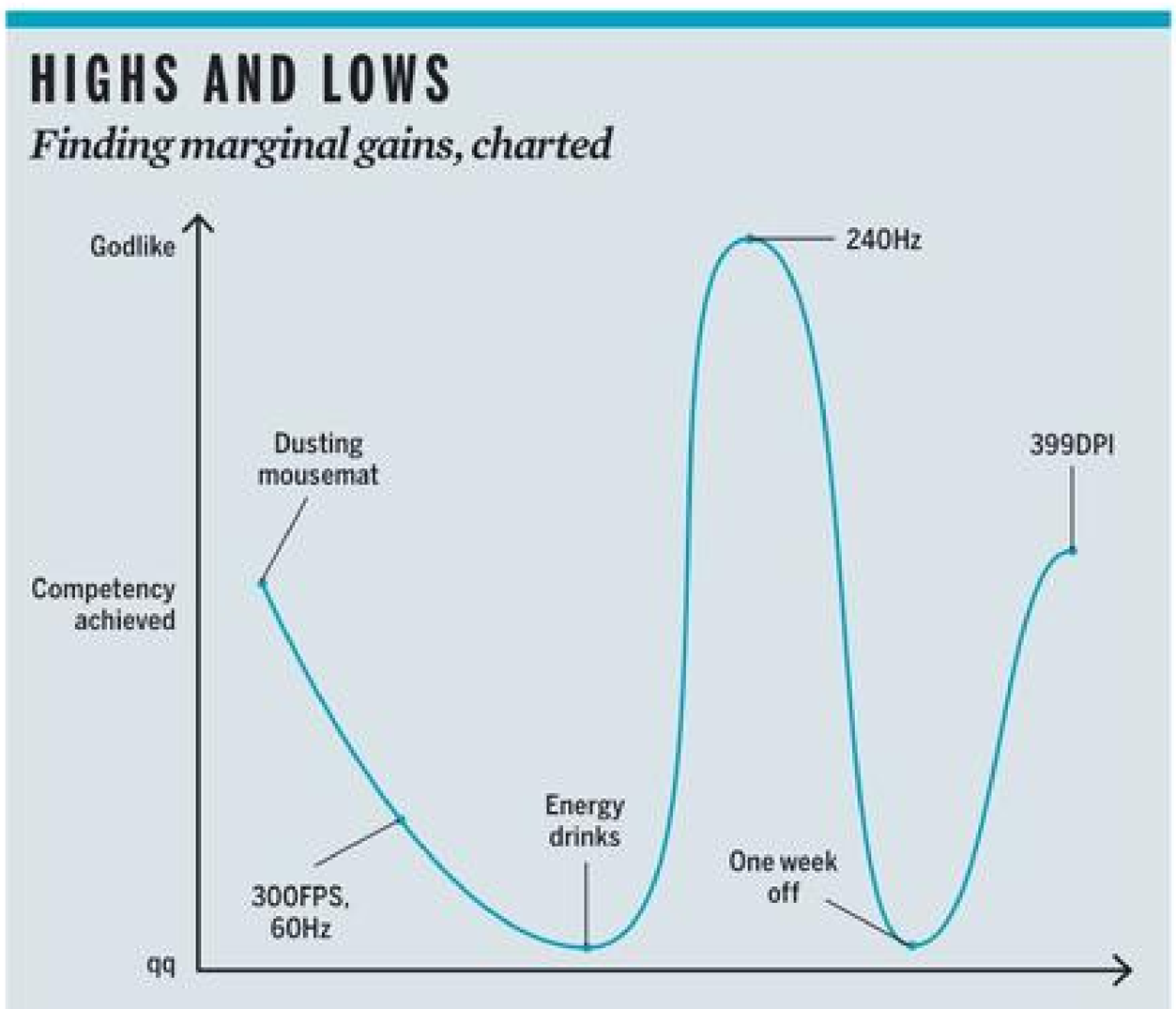
The catch, of course, is that you only see as many frames as your monitor can actually refresh in a given second. Since *CS:GO*'s not a particularly demanding game, most systems can run it at hundreds of FPS, but high refresh rate monitors are less commonplace. I swapped one in – a 240Hz panel that could give me 240 new bits of information on my enemy's whereabouts every second.

And this was a game changer. The smoothness of mouse movement, the clarity of enemy silhouettes in motion, was extraordinary when jumping up from 60fps. My k:d ratio made an immediate leap forwards.

PHIL IWANIUK
Phil Iwaniuk still isn't a Global Elite in *CS:GO*, he just doesn't blame his setup anymore. Rumoured to be prototyping the world's first all-mechanical key mousemat.

HIGHS AND LOWS

Finding marginal gains, charted



MAJOR LASER

Finally, the mouse and keyboard. I tried several gaming mice, all designed for shooters, all with massive DPI ranges, and found that the simple two-button Zowie FK1 was the clear winner. Most CSGO players use a DPI under 800 (I'm a 400 player) so the smoothness of movement in this sensitivity range mattered so much more than anything else. Even braided cabling. No mouse, however, affected my performance more than using the right DPI. In short: the correct software setting trumps any hardware upgrade. As for keyboards, I noticed no difference in my performance between using membrane or mechanical models.

I concluded the venture with a slightly higher rank, slightly less money in my bank account, and a sense of what investing in gaming hardware really buys you. All of us probably have one potential upgrade to our systems that we'd really feel a tangible benefit from, and perhaps even a little boost to our ability. But more often, we're investing in ourselves, committing to our pastime and enjoying the look and feel of a space that's devoted to what we love. ■

ABOVE: Look at them. Conspiring against you. Undermining your every input. We're onto you, peripherals.

BELOW: *CS:GO* is free to play, freeing up some frivolous upgrade budget.

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TWO WEEKS BEHIND ENEMY LINES IN

METAL GEAR SOLID V: THE PHANTOM PAIN

What I learned about Soviet Army discipline and the importance of showering. *By Samantha Greer*

This is a debrief report from Flaming Buffalo (I arrived late to codename assignment), from reconnaissance in the Soviet Army controlled region of Afghanistan. I was given two weeks to navigate and gather as much intel as possible on the USSR presence ahead of Big Boss' arrival. He's a busy guy, you know – it's not like he can be in two places at once. after all.

I was inserted by helicopter at 1800 hours near Spugmay Keep at the region's southernmost point, with the intent of navigating the entire outer edge. On foot I made my way to the nearest small guard post, where I planted myself up on a ridge with a view from above. I spent a whole day watching this meagre camp to glean what I could about their operation and let me tell you, these Soviet soldiers are a disciplined bunch. They barely sleep, barely chat, and certainly don't take breaks. As the one and only sandstorm of my two week excursion rolled in they barely flinched. If we find out they're all robots, I wouldn't be surprised.

Heading north I came to a larger settlement called Da Shago Kallai with a dozen or so soldiers, though something that I would come to learn is quite standard across their occupation is the use of decoys. I planted myself this time in an abandoned house at the edge of town, which was useful for its close proximity and great view, but also because it made it a bit easier to rest and pass the time.

From here I made a log of the trucks coming and going. Or single truck, with the same one seeming to go on rotation with a few neighbouring settlements, returning roughly every four hours. I couldn't identify any hierarchy here. There were specialist roles like radio operators, but no officers or leadership visibly apparent.

I spent over a day observing this place and noticed a few shift changes, with two guards getting sleep at a time. Eventually, at no discernible prompting, they decided to expand the perimeter of their patrols to include the outskirts, where my building was. On the afternoon of my third day a guard decided to use this as his vantage, and forced me to stealthily climb down the back of the building to find a position on a ridge nearby.

I waited until nightfall before moving on, evading trucks and searchlights to head out into the dunes for a resupply before heading on to Lamar Khaate Palace. It occurred to me how little the region resembles the mountainous Afghanistan, home to rains and snows, I'd been told about. In fact, it sure looks a lot like Jordan, a country almost 3,000 kilometres away. Perhaps the Soviets terraformed it, like how Big Boss encountered that Russian jungle years ago.

The palace is one of the few places that does resemble somewhere in Afghanistan, looking a lot like the Darul Aman Palace. It turned out to be defended by a skeleton crew bolstered by decoys and numerous mines. A truck came and went, stopping for less than an hour on each trip north or south. Do these soldiers have any orders besides defending these arbitrary spots?

IT'S ABOUT DAY FIVE WHEN I START LISTENING TO CASSETTE TAPES

WORDS AND DEEDS

It's about day five when I start listening to cassette tapes to help pass the time while I observe, in the absence of any life in the world or any dialogue from the soldiers. The only time I've heard these soldiers speak so far was to urge some goats to clear the road, an admittedly rare sign of activity.

The most surprising, or maybe alarming, thing I came to realise was that there were no Afghan people – civilians, resistance fighters, or otherwise. It seemed absurd that there wouldn't be a single one present, especially given their resistance is one of the only things the Soviet soldiers stationed here spoke about. In fact, you'd be forgiven for thinking the Soviet Army invaded Afghanistan simply so they could stand around and wait for Big Boss to show up.

After a day of observing the palace I moved on, heading north to reach the Wakh Sind Barracks. While weaving through a small canyon I stumble across a bear. Despite the threat the creature poses, it's honestly pleasing to see a living thing out in the world. I watched it for longer than is probably reasonable given my mission. Thankfully, I didn't get mauled to death.

Arriving south of the barracks, it was immediately apparent this is the most well-defended place I've encountered. Nestled on a steep slope, the place can only be entered from the front and is heavily fortified with high barricades and several emplacements where sentries scan with searchlights. There were still only a dozen guards present but the dense outpost makes those numbers count. With so little of the interior visible from outside, I decided I had to find a way inside if I was going to gather useful intelligence. Before I could get that far, though, a

THE RULES

1. Two (in-game) weeks to gather intel on most Soviet Outposts.
2. Try and find as many high-ranking officers as possible.
3. Only observe. The Soviet Army can never know I was there.

Can Diamond Dogs look up?

searchlight exposed me for a split second. Enough time for a guard to be convinced he saw something and call for someone to come check it out. I didn't hang around, and quickly reached a crack in the rock face, which I climbed to get inside the barracks.

Soldiers were speaking! An honest to god conversation! Something about Reagan and the futility of nuclear war. A sign of life in these automatons all the same. I crossed over the gateway to a high-up dugout that seemed disused and set up for a day of observation.

At dusk, perhaps due to me spooking them the night before, they had sentries posted above the gateway which certainly made my exfiltration trickier. I was halfway across the gateway when someone thought they saw me. Pushing on, I hugged the edge of the cliff and could do nothing but hold my breath as the soldier approached, torch in one hand, scanning the bushes. He came to stand just a few feet away.

If I had a tranq gun and no restrictions, this would be a nothing moment and he'd be unconscious already – but for my mission, this was as good as dead. I figured this was it, I'd blown the whole thing. There was no way he wouldn't spot me. I even got ready to draw my rifle. Then, impossibly, he failed to see me, and assumed he must have imagined it. Turning, he headed back to his post like an enemy spy hadn't been two steps away from him. Phew!

ESCAPE FROM NEW FOLK

Eh... I hesitated to add this to my report, but after my escape I noticed I was being pestered by flies – a sign my odour from a week in the field had grown quite strong. Sadly, a dip in the nearest river didn't wash me well enough to get rid of them, so I was stuck listening to their buzzing. Facing certain death or torture is one thing, but these flies, boss? Nothing in my training prepared me for them and their incessant noise. They're the USSR's greatest asset, a weapon to surpass Metal Gear. Ahem, once Metal Gear is invented, I mean. What year is it?

The supply depot to the north is surprisingly light on defences and vulnerable from the back, where I posted myself on a ridge that views the whole site. I'm not sure what supplies are kept here, since trucks never seemed to stop on their way through. I watched for a day and like every place before it, nothing unexpected happens. The Soviet Army is a well-oiled machine, its soldiers following an endless, unchanging routine. It feels... inhuman.

I moved on under darkness to Central Base Camp, supposedly the largest presence the Soviet Army has in the region. What I found was skeletal: the bones of a massive base occupied by a handful of soldiers stretched too thin to adequately defend it. It looked formidable from the outside, but I infiltrated it quite easily. Half the hangars are ruins. There were no tanks or armoured vehicles of any kind. Again, I failed to find officers.

I saw what seemed like some kind of briefing among soldiers, but nobody seemed to be in charge. Who is running this place? There's a sense that their forces are simply locked in a futile effort, dwarfed by the vast landscape around them, in no way up to the task. They're little more than cannon fodder for Big Boss.

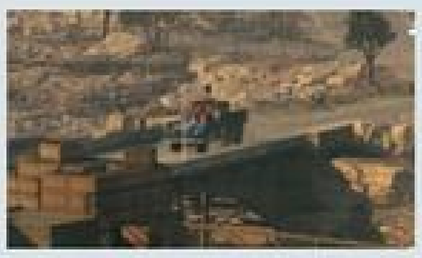
VOIGHT-KAMPFF TEST

If Soviets are real, where are these activities?

PETTING ANIMALS
You telling me a human wouldn't love those eyes?

TAKE A LEAK
I'm serious! Follow them for hours, they never need to go.

CHAT
They only ever seem to have conversations when I'm in earshot... curious.



GOOFING OFF
These guys drive around for days without ever resting. That's not human.

TOP: Someone taking their lunch on this hangar roof is one of my favourite little details.

ABOVE: They'll never be able to find me while I'm hiding two inches below a wall.

I'D GROWN COMFORTABLE AND STOPPED BEING AS CAUTIOUS, LIKE A FOOL

After a close call with a patrol, I got out of there and started the long march south, now worried I wasn't going to make the rendezvous on the 14th day. Thankfully the remaining sites I had to visit were easily observed and poorly defended. Things seemed to be going smoothly until I stumbled into a minefield. I'd grown too comfortable and stopped being as cautious, like a fool! I detonated one of the explosives by accident and injured my hand, but worst of all, put the entire area on high alert. I hope they thought it was a wild animal that set it off. None of the other outposts I passed afterwards seemed to be awaiting attack. I *think* I got away with it...

Heading south again I found a single soldier patrolling alone out in the middle of nowhere. Mostly the soldiers stuck to their designated posts, so this was well outside the norm. Why was he here? And why on his own? I stalked them for a little while, matching my footsteps to theirs just a few paces behind until I could finally make my way around them, undetected.

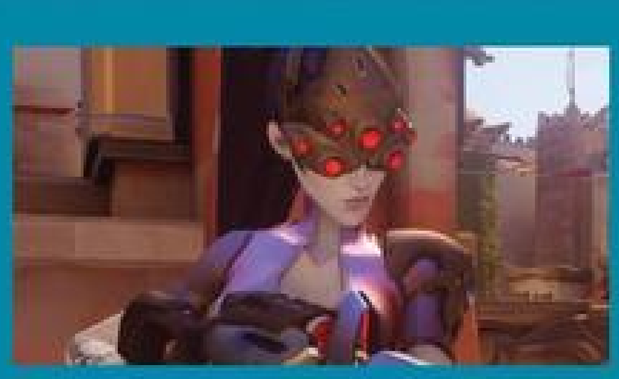
On the 11th day I arrived back at Spugmay Keep. I hadn't anticipated being early, and made a brief scouting hike to the town to the north, which was as poorly defended and unremarkable as the others. When the helicopter arrived at dawn, I climbed aboard without hesitation, but started to feel a little wistful as the landscape rolled away beneath me.

Not for my two weeks in this place, but for what I thought it might be when I first saw it years ago: a bustling, complex beast full of life and the unexpected. Instead it's a lifeless rock, populated by robots that pose about as much threat to the boss as shrapnel to his face. He's going to have no trouble here. Hell, I think he's going to have to make his own fun to get any kind of challenge or tension out of the place. Now, if you'll excuse me, I really need that shower. Flaming Buffalo, out. ■

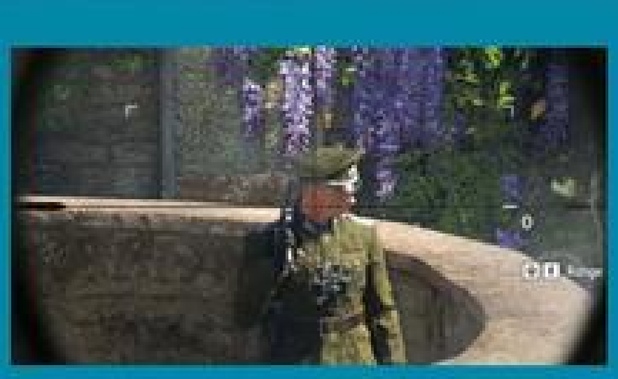
Literary reference, standing by.

SNIPING

Why does something so bad feel so good? *By Imogen Mellor*



RIGHT: A sight for sore eyes.



O*verwatch* is a 'dead game' to many but I still play a lot. When I'm sitting with friends in Discord shooting the shit, I also like to shoot shit, and *Overwatch* is my preferred place to do that. I've played hundreds of hours of Blizzard's shooter, and for the last three or four years my favourite hero to main has been Widowmaker. And it's had a terrible knock-on effect in other games.

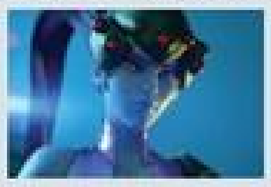
Sniping as a sexy french lady is, to me, the pièce de résistance of gunplay. There is nothing that sets off a small explosion of serotonin in my brain like getting a clean headshot on someone. The elegance. The ease of it all. It's the most competitive I get, to be honest, knowing that I killed someone even before they realised what was going on. Pure, shimmering, golden bliss.

I know Widowmaker's abilities through and through. Quick scoping isn't that great unless your enemy is really low. You should instead scope, wait for your gun to power up, and shoot at 100% power. I know this timing innately. It's second nature and frankly hard to unlearn for other games these days.

It can feel a little mean at times. When you've spent as many hours as I have in *Overwatch*, you cultivate such a good game sense that you can predict pretty basic player movements. I'm no god at the game, and I haven't even got a rank as I never put any real effort into the competitive mode. But I can at least pull off deliberately falling off a ledge for a Reaper to follow me down, before zipping back up and headshotting them – a bad manners bamboozle. If it's so wrong, then why does it feel so bloomin' good?

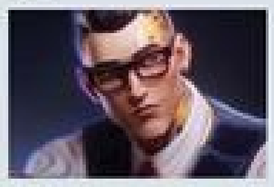
SNIPING'S ELITE

The best in the biz



WIDOWMAKER

Overwatch's femme fatale is a French ballerina with a sad history. After being kidnapped by the evil Talon and brainwashed, she murdered her own husband before returning to Talon.



CHAMBER

Valorant's sniping specialist is also French. There must be something in the wine. His ultimate ability Tour De Force gives him a very expensive, high powered sniper rifle. Ooh la la.

KARL FAIRBURNE

Karl Fairburne is an American sniper in the *Sniper Elite* series. If you've ever wondered what James Bond might be like as a Yank, he's your guy. He uses his rifle to foil the plans of evil Nazis.

SHOOT TO KILL

My theory of why I love sniping is that it's because I'm an archer in real life. As a sport, archery is all about taking one shot at a time. You train yourself to make every arrow count. There are entire mental exercises you do when competing that have the sole intention of calming yourself. I think that training seeped into the way I treat guns in games.

IT'S SECOND NATURE, AND FRANKLY HARD TO UNLEARN FOR OTHER GAMES

The satisfaction I feel when sniping isn't just found in *Overwatch* either, it carries through to other titles. Every time I pick up something new, whatever class gives me the most power per bullet is what I'll gravitate towards. If you can give me a gun and a good distance, that's where I'll happily sit. Does it always go well? No. I'm playing a lot of *Valorant* at the moment and the Operator sniper rifle, though a one shot kill, is seriously disrupted by any player movement. So I don't land 100% of my shots – but when I do, oh baby, there's nothing quite like it.

SMOOTH OPERATOR

Apex Legends has guns that give me the chills too. Even before I find a trusty Longbow DMR or a Sentinel, I'm picking up that light purple ammo scattered about. Shoguns? Eh. SMGs? Nah. Up close and personal fights are a nightmare, but hey, I'll just avoid them the best I can, sit on this tower, and wait for a butt-sliding pedestrian. It helps that *Apex Legends* gives me extra teammates, so they can do the dirty work while I twiddle my thumbs at the top of a building.

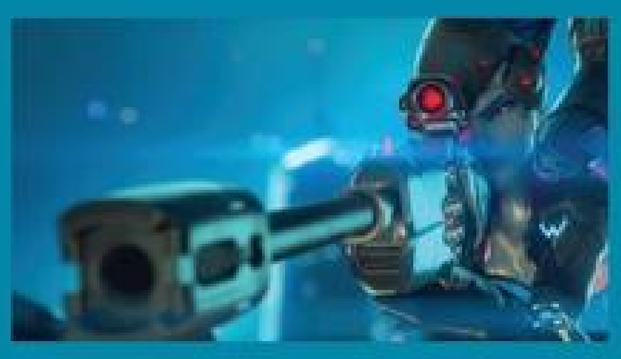
I've also dipped into the *Sniper Elite* games, and frolicking about the continent of Europe with a massive gun on my back feels strangely like a holiday. Picking off Nazis one by one surrounded by fragrant lavender fields, is a delicious treat. And additional mechanics like bullet drop add nuance that keeps the experience feeling tactical even in single-player.

There are some who find sniping as a whole, cheesy. Sometimes it can feel oppressive and unescapable. If you're up against a good sniper, no matter the game, your breath can get sharp as you die. You start huffing and puffing about how you didn't get a chance to respond as a respawn timer slowly ticks. And that's a downside, because it's often such fun at the other end of the scope.

The point of sniping, for me, isn't exactly to win the game. I don't have an intense desire to conquer everything I play. A match loss, unless it's caused by unquantifiably stupid teammates, is fine. GGs all round, I had a good time. Really I just enjoy the weightless moment as something as simple as a single pull of muscle in a finger devastates some pixels on my monitor. It's pure. It's effortless. It's so much fun. Sniping is just the best. ■

NEED TO KNOW

RELEASE May 24, 2016	**DEVELOPER** Blizzard Entertainment
PUBLISHER In-house	**LINK** playoverwatch.com



LEFT: It's the eye of the spider, it's the thrill of the fight.

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